Journal of The Chemical Society

Dalton Transactions

A Journal of Inorganic Chemistry

including bioinorganic, organometallic, and solid-state chemistry, and chemically significant spectroscopy

Indexes 1980

JOURNAL
OF
THE CHEMICAL SOCIETY

DALTON TRANSACTIONS
Inorganic Chemistry

LONDON: THE CHEMICAL SOCIETY
1980

COPYRIGHT RESERVED

Printed in Great Britain by
Richard Clay (The Chaucer Press), Ltd.,
Bungay, Suffolk

AUTHOR INDEX, 1980

Abel, Edward W., 1169–74, 1175–81, 1582–92, 2208–19, 2220–7
Adams, Christopher J., 269–75
Adams, David M., 1482–6
Adams, John M., 269–75
Aime, Silvio, 46–51
Ainscough, Eric W., 1042–7
Airoldi, Claudio, 156–8, 1823–6, 2010–15
Alamgir, Mohammed, 1542–4
Albano, Vincenzo G., 52–4, 163–6, 1816–19, 1820–2
Albertin, Gabriele, 979–83
Alcock, Nathaniel W., 115–20, 1182–5, 1471–4
Al-Derzi, Afaf, 1425–33
Ali, Ahmed A. M., 638–44
Ali, M. Farhat, 1545–9
Al-Mowali, Ali H., 426–8
Alsaadi, Basim M., 597–602, 813–16
Alsaadi, Basin M., 2147–50, 2151–4
Al-Salem, Najeeb A., 59–63
Al-Shatti, Najat, 2533–5
Alyea, Elmer C., 137–44
Amira, Mohamed F., 1726–30
Amirkhalili, Saeid, 2493–7
Anderson, Gordon K., 712–15, 1434–8, 1988–91
Anderson, Richard A., 205–8, 209–15
Annibale, Giuliano, 220–3, 1017–21
Antholine, William E., 590–6
Arcoleo, Gioacchina, 41–5
Arthurs, Michael, 2053–9
Ashworth, Christopher C., 1945–57
Ashworth, Terence V., 1593–600 1609–14, 1615–24
Assuncao, Francisco P., 1823–6
Atwood, Jerry L., 229–34, 467–70, 1032–5, 1253–8, 2108–16
Auburn, Mary, 659–66
Austin, Jack M., 854–9, 860–4
Backer–Dirks, J. D. Julius, 2191–8
Bailey, Neil A., 829–36, 984–90, 1939–44, 1945–57
Bailey, Pamela M., 1048–54
Baird, Michael C., 2488–92
Baker, Paul K., 579–85, 1710–15
Bandoli, Giuliano, 459–66, 1304–11
Banerjee, Pradyot, 2385–7, 2452–5
Banister, Arthur J., 731–5, 937–41, 1457–60, 1812–15
Barbieri, Renato, 1983–7
Barbour, Christopher J., 2001–5
Barbucci, Rolando, 253–6
Barker, Geoffrey K., 1186–99
Barlow, Michael T., 1374–8
Barnard, Christopher F. J., 2418–24
Barnard, Peter W. C., 1542–4
Barnes, John C., 949–53
Barone, Vincenzo, 253–6
Barrow, Michael J., 603–6, 1838–44
Barszcz, Barbara, 24–8
Bassett, Jean Marie, 1779–88, 1789–90
Bates, John C., 1487–8
Beattie, Ian R., 535–8
Bellachioma, Gianfranco, 634–7
Bellon, Pier Luigi, 2060–7
Benedetti, Adriano, 1467–70
Benfield, Robert E., 1743–67
Ben–Shoshan, Raphael, 771–5
Berry, Frank J., 2241–5, 2306–8
Berry, Madeleine, 29–40, 1601–8 1615–24, 1625–9
Berthon, Guy, 2374–81
Bevan, David J., 1904–9
Bhaduri, Sumit, 1572–6
Bhagwat, Urmila A., 2319–22
Bharadwaj, Lalit M., 1526–31
Bhattacharya, Pabitra Krishna, 810–12
Bhattacharyya, S. P., 345–8
Bhattacharyya, Sudhindra N., 675–80
Birchall, Thomas, 1060–5
Bishop, Michael M., 1390–6
Black, John D., 1646–50
Black, John David, 1651–4
Blandamer, Michael J., 1–6, 607–15, 616–19, 2442–6
Blandamer, Michael J, 1809–11
Blunt, Edward H., 829–36
Boag, Neil M., 1200–7, 1208–19, 1220–7, 2170–81, 2182–90
Bocelli, Gabriele, 638–44
Bochman, Manfred, 1879–87
Bochmann, Manfred, 901–10, 1797–9, 1863–71
Bombieri, Gabriella, 1098–100
Bonapasta, Aldo Amore, 1087–90
Bonny, Alan, 224–8
Bonomo, Raffaele P., 369–75
Bontempelli, Gino, 2288–93
Boocock, Simon K., 790–6
Boorman, P. Michael, 257–61
Booth, Brian L.,, 407–11
Booth, Brian L., 403–6, 412–15
Booth, Martin, 1582–92
Bordignon, Emilio, 979–83
Bossa, Mario, 1087–90
Bottomley, Frank, 487–91, 1359–67
Bottomley, Lawrence A., 1827–37
Bottrill, Martin, 292–8
Boubel, Jean C., 2081–9
Boxhoorn, Gosse, 1328–35, 1336–41
Boylan, Michael J., 1646–50, 1651–4
Bradley, Donald C., 2010–15
Braga, Dario, 52–4, 1816–19, 1820–2
Braterman, Paul S., 1646–50, 1651–4, 2318
Bregeault, Jean Marie, 192–5
Bresciani–Pahor, Nevenka, 1511–14
Briggs, John R., 64–9
Brint, Paul, 1236–42, 1342–8
Brisdon, Brian J., 1317–23, 2129–37
Brittain, Harry G., 2369–73
Broadley, Karen, 1710–15
Brockway, David J., 1112–17
Brodie, Andrew M., 1042–7
Brown, Charles Eric, 590–6
Brown, David, 70–5, 1076–8
Brown, David B., 845–50
Brown, Donald H., 767–70
Brown, Douglas H., 871–4
Brown, I. David, 1118–23
Brown, Kevin L., 1042–7
Brown, Paul L., 1577–81
Buckingham, David A., 2255–8
Budo–Zahonyi, Eva, 276–83
Bullivant, David P., 105–8, 109–14
Bunker, Mark J., 2155–61
Burgess, John, 1–6, 607–15, 616–19, 1809–11, 2442–6
Burke, Philip J., 1439–42, 1794–6
Burkinshaw, Philip M., 999–1004 2237–40
Burriesci, Nicola, 1983–7
Burrows, Aubrey L., 1135–41
Bursey, Maurice M., 1416–18
Burt, Roger J., 1228–35
Caddy, Peter, 962–72
Cairns, Colin, 2020–7
Calderazzo, Fausto, 1419–24, 1965–9
Calhorda, Maria J., 1443–7
Calhoun, Harry P., 1282–91
Calligaris, Mario, 1511–14
Calogero, Sandro, 646–53, 2303–5
Cameron, James H., 2001–5
Campanella, Stefano, 1816–19, 1820–2
Campbell, Jeremy R., 2228–36
Cannas, Maric, 2090–4
Canovese, Luciano, 1017–21
Canty, Allan J., 1693–7
Cardaci, Giuseppe, 634–7
Cardoso, Ana M., 1156–60
Carmona, Ernesto, 2108–16
Carmona–Guzman, Ernesto, 467–70
Carpenter, Peter, 1726–30
Carroll, W. Eamon, 80–6
Cartwright, Michael, 817–20
Casella, Luigi, 1655–63
Casey, Geoffrey C., 403–6
Cattalini, Lucio, 1017–21
Cauletti, Carla, 1087–90
Cavasino, F. Paolo, 41–5
Cavell, Kingsley J., 763–6, 1638–40
Cenini, Sergio, 1145–9, 2060–7
Cerfontain, Marinus B., 1336–41
Ceriotti, Alessandro, 1816–19, 1820–2
Chagas, Aecio, 1823–6
Chagas, Aecio P., 156–8
Chaichit, Narongsak, 1693–7
Chakravorty, Animesh, 1698–702
Chatt, Joseph, 121–7, 492–8, 771–5, 1129–34, 1408–15, 2032–8
Chaudret, Bruno, 539–44
Che, Chi Ming, 128–33, 756–62
Chemaly, Susan M., 2259–66, 2267–73, 2274–81
Chikira, Makato, 526–34
Chini, Paolo, 52–4, 163–6, 1537–42, 1816–19, 1820–2
Choukroun, Robert, 1800–2
Christofides, Aristides, 2095–101
Christou, George, 2354–9, 2360–8
Chudzynska, Halina, 2010–15
Chung, Chung–Sun, 1349–51
Ciampolini, Mario, 376–82
Ciani, Gianfranco, 163–6
Ciliberto, Enrico, 145–8
Ciriano, Miguel, 659–66
Clamp, Sara, 2162–9
Clark, Charles R., 2255–8
Clark, Deborah A., 565–9
Clark, Robin J. H., 1156–60, 2228–36, 2498–502
Cleaver, Kevin D., 245–7
Clemente, Dore A., 459–66, 1304–11
Cocolios, Panayotis, 2081–9
Cole–Hamilton, David J., 55–8
Collamati, Ines, 1965–9
Colligiani, Arturo, 1419–24
Collison, David, 667–74
Colquohoun, Ian J., 2480–7
Comin–Chiaramonti, Piero, 1511–14
Connelly, Alan, 1012–16
Connelly, Neil G., 579–85, 1710–15, 2162–9
Constable, Anthony G., 1992–2000, 2282–7
Cooke, James E., 2191–8
Cookson, David J., 1297–9
Cooper, Mervyn K., 349–54, 570–3
Cooper, N. John, 29–40
Costa, Giacomo, 1489–93
Cowan, Niel D., 821–4
Crichton, Oliver, 167–73
Crocker, Christopher, 64–9
Cross, Ronald J., 712–15, 871–4, 1434–8, 1988–91, 2434–41
Curzon, Eirian H., 574–8, 721–5
Cusumano, Matteo, 2044–5, 2456–61
Dain, C. John, 1374–8
Dale, Barrie W., 895–900
Daniels, J. Anthony, 2418–24
Daroda, Romeu J., 2315–17
Davies, J. Eric D., 245–7
Davies, Julian A., 2246–9
De Cian, Andre, 2155–61
Deeming, Antony J., 1259–64, 1974–82
De Jaeger, Roger, 851–3
Delfini, Maurizio, 253–6
Dell'Amico, Giancarlo, 1419–24
Del Pra, Antonio, 646–53
Demartin, Francesco, 2060–7
De Nobili, Maria, 2288–93
Desreux, Jean F., 865–8
Dessy, Giulia, 1272–6, 1965–9
Diamantis, Alex A., 1731–3
Dias, Alberto R., 1443–7
Dias, Shelton A., 137–44
Dickers, Hugh M., 308–13
Dickinson, Roger J., 895–900
Di Dio, Emanuele, 41–5
Dillon, Keith B., 1036–41, 2401–4
Dilts, Joseph A., 845–50

Diversi, Pietro, 1633–7
Dixon, Denis T., 999–1004, 2237–40
Donaldson, John D., 1542–4
Dove, Michael F. A., 105–8, 109–14
Downey, Raymond F., 1048–54
Downs, Anthony J., 1374–8
Drew, Michael G. B., 942–8, 1317–23, 2020–7, 2075–80, 2129–37, 2503–8
Drummond, Allison, 284–8
Duce, Philip P., 2442–6
Duce, Philip R., 1809–11
Duckworth, Paul A., 570–3
Duffield, Andrew J., 1–6
Duggan, Mary, 690–8, 1342–8
Duyckaerts, Georges, 865–8
Eady, Colin R., 383–9
Eastland, George W., 709–11, 1682–7
Ebsworth, E. A. V., 603–6, 1768–70, 1838–44
Edwards, Anthony J., 289–91, 869–70, 1630–2, 1734–6, 2306–8
Edwards, Dennis A., 1317–23, 2129–37
Edwards, Julie D., 545–51, 552–8
Edwards, Peter, 334–44
Edwards, Peter G., 2467–75
Egdell, Russell G., 145–8
Elgy, Christine N., 2405–9
Empsall, H. David, 302–7
Emsley, John, 2028–31
Errington, John, 2309–11, 2312–14
Espinet, Pablo, 1048–54
Estes, William E., 2121–4
Evans, Jeffrey C., 1277–81
Evans, John, 1005–11
Fabbrizzi, Luigi, 134–6, 1055–9
Fairhurst, Geoffrey, 829–36
Fares, Vincenzo, 1272–6, 1965–9
Farrugia, Louis J., 1789–90
Favas, Mark C., 447–53, 454–8
Fawcett, John, 2294–6
Fenton, David E., 984–90
Ferguson, George, 137–44
Fernandez, Inmaculada, 918–22
Ferraudi, Guillermo, 476–80
Ferrer, Miguel, 14–18, 2533–5
Ferruti, Paolo, 253–6
Fielder, Andrew J., 1457–60
Fielding, Peter E., 1688–92
Figgis, Brain N., 2339–47
Figgis, Brian N., 1515–25, 1688–92, 2333–8, 2348–53
Fild, Manfred, 638–44
Finch, Arthur, 869–70, 2401–4, 2415–17
Fischer, Beda E., 1022–8
Fischer, Jean, 2522–5
Fitzsimmons, Brian W., 180–5
Fornies, Juan, 888–94
Foss, Olav, 620–3, 624–7, 628–31 632–3
Fournari, Pierre, 2081–9
Foy, Robert M., 440–6
Fragala, Ignazio, 145–8
Francis, Colin G., 1401–7
Franklin, Margaret V., 984–90
Froncisz, Wojciech, 590–6
Fronczek, F., 2318
Fuger, Jean, 70–5, 1076–8
Fullarton, Alistair, 1651–4
Furlani, Anita, 1958–60
Gahan, Brendan, 667–74
Galas, Anita M. R., 80–6, 511–18, 1771–8, 1797–9, 2191–8, 2480–7
Gallori, Elisabetta, 1722–5
Ganguly, Parthasarathy, 1397–400
Garner, C. David, 667–74, 2354–9, 2360–8
Garzo, Gabriella, 2068–74
Gatehouse, Bryan M., 1693–7
Gates, Peter N., 869–70, 2401–4, 2415–17
Gavens, Paul D., 911–17
Gennaro, Antonio, 1983–7
Gervais, Daniele, 1800–2
Ghatak, I., 1572–6
Ghotra, Joginder S., 2191–8
Gibson, Martin, 767–70
Gillard, R. D., 1277–81, 2102–7
Gillespie, Ronald J., 481–3, 1898–903
Gillies, Duncan G., 1439–42
Ginzburg, Gregory, 1243–7
Glasser, Lesley S. Dent, 393–8, 399–402
Glennon, Carmel S., 19–23
Goddard, Richard, 559–64
Goh, Lai Yoong, 1641–5
Goh, Swee Hock, 1641–5
Gold, Victor, 2028–31
Goldwhite, Harold, 2428–33
Gonzalez, Francisco, 2108–16
Gopalakrishnan, Jagannatha, 837–9
Gould, Robert O., 804–9
Granozzi, Gaetano, 145–8
Gray, Colin J., 2191–8
Greatrex, Robert, 918–22
Green, Malcolm L. H., 29–40, 2155–61
Green, Michael, 80–6, 292–8, 962–72, 1186–99, 1200–7, 1208–19, 1220–7, 1779–88, 2170–81, 2182–90
Greenwood, Norman N., 196–200, 790–6, 918–22, 1251–2
Grein, Friedrich, 1359–67
Griffin, Richard T., 1550–5
Griffith, William P., 192–5, 2228–36, 2410–14, 2526–32
Griffiths, Clifford H., 2300–2
Griffiths, Trevor R., 205–8, 209–15
Grinter, Roger, 1910–16
Groenewald, Theo, 854–9, 860–4
Grove, David M., 2170–81
Guarini, Giulio G. T., 269–75
Guastini, Carlo, 1958–60
Gubelmann, Michel H., 1791–3
Guerchais, Jacques E., 289–91
Guerney, Philip J., 349–54
Guest, Martyn F., 1425–33
Guglielmo, Giovanni, 2044–5
Guilard, Roger, 2081–9
Gulliver, David J., 1872–8
Gupta, Yugu K., 1526–31
Gushikem, Yoshitaka, 2016–19
Guzman, Ernesto Carmona, 229–34
Gynane, Michael J. S., 2428–33
Haase, Wolfgang, 875–9, 1703–9
Habeeb, Jacob J., 1161–3
Haines, Robert I., 607–15, 2442–6
Haley, Martin J., 105–8, 109–14
Hall, John R., 149–55, 1091–7, 2199–207
Hall, Jonathan P., 2228–36, 2410–14
Hall, Michael, 984–90, 1292–6
Hall, Thomas L., 1448–56
Hamshere, Stephen J., 1809–11
Hana, Arsein A. K., 869–70, 1734–6
Hancock, Robert D., 416–18, 654–8
Hand, Timothy D., 14–18, 19–23
Hanson, Brian E., 1852–7
Haque, Zahida P., 1664–7
Harding, Marjorie M., 603–6, 1838–44
Hargittai, Istvan, 87–9
Hargittai, Magdolna, 87–9
Harkins, Peter, 1012–16
Harris, Arlo D., 314–16, 2382–4
Harris, Gordon S., 1545–9
Harris, Robin K., 638–44
Harrison, Brian, 2382–4
Hart, F. Alan, 2191–8
Hartley, Frank R., 2246–9
Hartman, J. Stephen, 1142–4
Hasty, Robert A., 1269–71
Haszeldine, Robert N., 308–13, 403–6, 407–11, 412–15, 705–8, 923–7
Hatfield, William E., 2121–4
Hathaway, Brian, 1105–11, 1342–8
Hathaway, Brian J., 681–9, 690–8
Hauptman, Zdenek V., 731–5
Hay, Robert W., 2385–7, 2452–5
Hazell, Alan, 973–8
Head, Robert A., 1129–34, 1150–5
Heaton, Brian T., 1537–42
Henis, Neil B. H., 1416–18
Henrick, Kim, 1550–5
Hernandez, Norma L., 2297–9
Herron, Norman, 574–8, 721–5
Hey, Richard G., 1457–60, 1812–15
Higginson, William C. E., 797–803
Hill, John O., 763–6, 1638–40
Hill, Lesley H., 1475–81
Hine, Ken, 1135–41
Hitchcock, Peter B., 1150–5, 2493–7
Hoebbel, Dagobert, 2068–74
Hogenkamp, Harry P. C., 1668–73
Holbourn, Paul E., 2241–5
Holland, Philip R., 2418–24
Holmes–Smith, Rupert D., 159–62
Houghton, Roy P., 2102–7
Howard, Judith A. K., 659–66, 1593–600, 1601–8, 1609–14, 1615–24, 1625–9, 1779–88, 2095–101, 2170–81, 2182–90
Howden, Martin E., 1716–21
Howell, James A. S., 503–10, 999–1004, 1845–51, 2237–40
Howlader, Nepal C., 1475–81
Howsinger, Robert, 1668–73
Hudson, Andrew, 2428–33
Huggett, Paul G., 1164–8
Hume, Allan R., 180–5
Hunter, John A., 880–7
Hunter, William E., 229–34, 467–70, 1032–5
Huntley, Christopher M., 954–7
Hursthouse, Michael B., 334–44, 355–9, 511–18, 901–10, 1475–81, 1771–8, 1797–9, 1863–71, 1974–82, 2010–15, 2191–8, 2315–17, 2467–75, 2480–7
Hurtgen, Christian, 70–5
Hussain, M. Sakhawat, 750–5
Hussain, Wasif, 771–5, 1408–15
Hynes, Michael J., 7–13, 1502–10
Immirzi, Attilio, 1098–100
Ingrosso, Giovanni, 1633–7
Jackson, Peter F., 383–9
Jagannathan, Krishnaswamy, 1397–400
Jais, M. Jamil B., 2028–31
Janickis, Vitalijus, 620–3, 624–7 628–31, 632–3
Jastrzebski, Johann T. B. H., 1352–8
Jeffreys, John A. D., 435–9
Johnson, Brian F. G., 99–104, 383–9, 716–20, 1135–41, 1248–50, 1572–6, 1743–67, 1852–7
Johnson, Charles E., 2354–9
Johnson, Martin R., 1945–57
Johnson, Michael K., 1910–16
Johnson, Robert A., 149–55, 1091–7, 2199–207
Johnson, Stephen, 302–7
Jones, Brian M. R., 579–85
Jones, D. Philip, 2526–32
Jones, David L., 565–9
Jones, Richard A., 55–8, 511–18, 1771–8, 2480–7
Jorgensen, Norman, 2051–2
Jozefonvicz, Jacqueline, 76–9
Kadish, Karl M., 1827–37
Kan, C. T., 2032–8
Kan, Yan Ping, 128–33
Kanamaru, F., 1029–31
Katoch, Dhruvendar S., 2476–9
Katsura, Takashi, 825–8, 2125–8
Katz, Miguel, 2297–9
Katz, Nestor E., 2297–9
Kauffman, George B., 1791–3
Kawajiri, Taeko, 726–30
Kay, Jack F., 284–8, 1917–20
Kayali, Aycil, 2374–81
Keat, Rodney, 321–6, 871–4, 928–36, 1858–62
Keller, Heimo J., 2498–502
Kelly, Barbara A., 1710–15
Kemmitt, Raymond D. W., 1716–21
Kemp, Terence J., 1182–5
Kennard, Colin H. L., 149–55, 1091–7, 2199–207, 2462–6
Kennedy, John D., 196–200, 790–6
Kepert, David L., 440–6, 447–53 454–8, 1921–7, 1932–8
Keppler, Bernt, 2498–502
Kergoat, Rene, 289–91
Khair, Abul, 1572–6
Khalil, Mutasim I., 314–16
Khan, A. Rauf, 1169–74, 1175–81, 2208–19, 2220–7
Kimura, Eiichi, 327–33, 2447–51 2536–8
Kimura, Masaru, 726–30
King, Boyd, 880–7
Kinomura, N., 1029–31
Kirschenbaum, Louis J., 1243–7
Kitchen, Maureen D., 1710–15
Kite, Kenneth, 1169–74, 1175–81 2208–19, 2220–7
Knobler, Carolyn, 248–52
Knox, C. Victor, 942–8

Knox, Selby A. R., 235–9, 545–51, 552–8
Kodama, Mutsuo, 327–33, 2447–51, 2536–8
Kohli, D. K., 2318
Kohlmiller, Nancy A., 1668–73
Koizumi, M., 1029–31
Kon, Hideo, 526–34
Kowalewski, Jozef, 363–8
Krasznai, John P., 481–3
Krishnamurthy, S. S., 840–4
Kroon, Jan, 1352–8
Kucharski, Edward S., 1515–25, 1932–8
Kuendig, Ernst Peter, 991–5
Kurmoo, Mohamedally, 2498–502
Kurtev, Kurti, 55–8
Kustin, Kenneth, 2250–4
Labauze, Gerard, 2388–94, 2425–7
Lachowski, Eric E., 393–8, 399–402
Laguna, Mariano, 1593–600, 1615–24
La Monica, Girolamo, 1145–9
Lampe, Paul A., 1471–4
Lancashire, Robert J., 1277–81
Lanfranchi, Maurizio, 1893–7
Lappert, Michael F., 90–8, 1448–56, 2428–33
Larkworthy, Leslie F., 262–8, 2042–3
Laurenson, Graham S., 954–7
Laycock, David E., 2488–92
Lecomte, Claude, 2081–9
Lednor, Peter W., 1448–56
Leigh, G. Jeffery, 121–7, 1129–34 1408–15, 1425–33, 2032–8
Leigh, G. Jeffrey, 771–5
Lenarcik, Beniamin, 24–8
Leslie, Alison E., 2318
Lethbridge, James W., 2039–41
Levason, William, 419–22, 1872–8
Lewis, Jack, 383–9, 716–20, 736–42, 743–9, 1135–41, 1248–50, 1383–9, 1390–6, 1664–7, 1852–7
Liang, Bih–Fong, 1349–51
Licoccia, Silvia, 1958–60
Lin, Ivan J. B., 487–91
Lin, Margaret, 2488–92
Lincoln, Stephen F., 699–704
Lindsell, W. Edward, 880–7
Lis, Tadeusz, 996–8
Lock, George A., 1265–8
Logan, Norman, 314–16, 2382–4
Longoni, Giuliano, 1537–42, 1816–19, 1820–2
Louttit, Thomas S., 2162–9
Lucherini, Antonio, 1633–7
Ludman, Clifford J., 821–4
Lynch, Roderick J., 1164–8
Mabbs, Frank E., 667–74, 1475–81
McAlees, Alan J., 137–44
McCabe, Richard W., 90–8
McCarthy, Davina A., 797–803
McCleverty,, Jon A., 1939–44
McCleverty, Jon A., 1945–57
McCrindle, Robert, 137–44
McDonald, Walter S., 59–63, 64–9, 790–6, 1251–2, 1992–2000, 2282–7, 2309–11, 2312–14
McDougall, Gloria J., 654–8
McFall, Stephen G., 2020–7
McFarlane, H. Christina E., 240–4
McFarlane, William, 240–4, 2480–7
McGowan, John C., 616–19
McHugh, Terence M., 1803–8, 2323–32
McKinney, Ronald J., 235–9
McMillin, David R., 1794–6
McNeillie, Alistair, 767–70
McPartlin, Mary, 349–54, 383–9 570–3, 1550–5
McQuillan, Geoffrey P., 2046–8
MacQuitty, Jonathan J., 90–8
Madhusudan, W. Hanumanthar-ao, 1397–400
Magee, Robert J., 763–6, 1638–40
Magno, Franco, 2288–93
Magon, Luciano, 1324–7
Maher, John P., 579–85
Maitlis, Peter M., 1048–54, 1368–73
Malatesta, Maria Carlotta, 383–9
Malik, K. M. Abdul, 334–44, 355–9, 511–18, 901–10, 1475–81, 1771–8, 1797–9, 1863–71, 1974–82, 2010–15, 2315–17, 2467–75
Malito, John T., 1253–8
Malkin, Leslie S., 308–13
Manassero, Mario, 2060–7
Mann, Brian E., 776–85
Manning, A. R., 186–91
Manojlovic–Muir, Ljubica, 317–20
Manoli, Jean Marie, 192–5
Manotti Lanfredi, Anna Maria, 1893–7
Marangoni, Giampaolo, 459–66, 1304–11
Marchetti, Fabio, 1419–24
Markham, Richard, 59–63
Marongiu, Giaime, 2090–4
Marques, Catherine, 1269–71
Marsden, Colin J., 535–8
Marsich, Nazario, 1489–93
Martin, Dominique, 1898–903
Martinengo, Secondo, 52–4, 163–6
Martinez, Francisco, 888–94
Martin–Gil, Jesus, 1625–9
Martini, Emilio, 1722–5
Mascharak, Pradip K., 1698–702
Mason, Ronald, 1688–92, 2333–8
Mason, Sax A., 1688–92
Massaux, Jean, 865–8
Masson, Charles R., 1282–91
Mather, Adrian P., 308–13, 923–7
Mathey, Francois, 2522–5
Mattes, Rainer, 423–5
Matthews, Ray W., 1439–42, 1550–5
Matuszewski, Janusz, 996–8
Matwiyoff, Nicholas A., 1668–73
Mawby, Roger J., 565–9, 1904–9 2418–24
Mays, Martin J., 911–17
Mazid, Muhammed A., 1682–7, 1737–42
Mazzocchin, Gian Antonio, 979–83
Mealli, Carlo, 376–82
Mentasti, Edoardo, 958–61
Mergehenn, Reiner, 1703–9
Merrill, Connie L., 1827–37
Mertis, Konstantinos, 334–44
Merz, Ludwig, 875–9, 1703–9
Meyerstein, Dan, 1243–7
Micheloni, Mauro, 134–6, 1055–9, 1722–5
Micic, Olga I., 586–9
Middleton, A. Robert, 174–9, 1888–92
Miller, John R., 1461–6
Miller, Richard M., 2354–9
Milone, Luciano, 46–51
Mingos, D. M. P., 1572–6
Mingos, D. Michael P., 1674–81
Mitchell, Paul R., 1079–86
Mitschler, Andre, 2522–5
Mitsudo, Takeaki, 429–34
Monaci, Anna, 499–502, 1087–90 1893–7
Monk, Cecil B., 1726–30
Moore, Peter, 574–8, 721–5, 1471–4
Moorhouse, Stephen, 1156–60
Moreau, Joel J. E., 2155–61
Moreto, Josep, 1368–73
Morgan, Peter H., 1277–81
Morpurgo, Giorgio Oscar, 1272–6
Morris, Donald F. C., 216–19
Morris, John H., 284–8, 1917–20
Morrison, Norman J., 1945–57
Morss, Lester, 1076–8
Mosini, Valeria, 1272–6
Moulton, Christopher J., 299–301
Muir, Kenneth W., 317–20
Muk, Aurora A., 586–9
Mukaida, Masao, 487–91
Mukhedkar, Anant J., 2319–22
Mukhedkar, Vasudha A., 2319–22
Mullane, John, 690–8
Muller, Daniel, 76–9
Murell, John N., 2395–400
Murray, Keith S., 1112–17
Murray, Martin, 80–6, 659–66
Murray, Stephen G., 1872–8, 2246–9
Murrell, John N., 1425–33
Murtas, Stefania, 1633–7
Murthy, A. R. Vasudeva, 840–4
Murugesan, Thangamuthu, 837–9
Musco, Alfredo, 776–85
Myers, Ronald D., 1060–5
Nabi, Syed Nurun, 355–9
Nair, Madhavan Sivasankaran, 2138–42
Nardi, Nicoletta, 376–82
Nardin, Giorgio, 220–3, 369–75, 1511–14
Nash, John A., 240–4
Natarajan, Paramasivam, 1312–16, 2138–42
Natile, Giovanni, 220–3, 1017–21
Nazer, Abdul Fattah M., 1532–6 2143–6
Neish, Margaret A., 880–7
Nelson, S. Martin, 942–8, 2020–7 2053–9
Nelson, William J. H., 383–9
Nemeth, Sandor, 276–83
Nenadovic, Milica T., 586–9
Neukomm, Heinrich, 121–7
Newkome, G. R., 2318
Newman, Peter J., 1112–17
Newton, William J., 1379–82
Noltes, Jan G., 1352–8
Nordenskioeld, Lars, 363–8
Norton, Michael C., 59–63
O'Brien, Edmund, 292–8, 962–72
O'Connor, Charles J., 786–9
O'Dell, Brenda D., 257–61
O'Donoghue, Timothy D., 736–42, 743–9, 1383–9, 1390–6 1664–7
Ogden, J. Steven, 419–22, 535–8
Oldham, Colin, 1379–82
O'Regan, Brigid D., 7–13, 1502–10
O'Reilly, Eric J., 2462–6
Orpen, A Guy, 2509–16
Orrell, Keith G., 1169–74, 1175–81, 1582–92, 2208–19, 2220–7
Oskam, Ad, 1328–35, 1336–41
Owen, John D., 1066–75
Paci, Maurizio, 1961–4
Paddick, Kathleen E., 1317–23
Page, Terence H., 2401–4, 2415–17
Pampaloni, Guido, 1965–9
Paoletti, Piero, 134–6, 1055–9, 1722–5
Paolucci, Gino, 459–66, 1304–11
Parish, R. V., 308–13, 705–8, 895–900, 923–7
Parker, David G., 1135–41
Parvez, Masood, 137–44
Pasini, Alessandro, 1655–63
Patel, Shantubai N., 1630–2
Patterson, Judy L., 487–91
Patterson, Larry K., 476–80
Pauling, Linus, 645
Peacock, Raymond D., 2294–6
Pedrosa, Graciela C., 2297–9
Pelin, Kevin, 1342–8
Pelizzetti, Ezio, 484–6
Pelizzi, Corrado, 1970–3
Pelizzi, Giancarlo, 1419–24, 1970–3
Pellerito, Lorenzo, 1983–7
Penfold, Bruce R., 248–52
Perez–Salazar, Adela, 1812–15
Perlmutter–Hayman, Berta, 1124–8
Pertici, Paolo, 1961–4
Petit, Michel A., 76–9
Petrera, Michele, 1983–7
Petridis, Dimitris, 1921–7, 1928–31
Pickett, Christopher J., 121–7, 2032–8
Pilbrow, John R., 1297–9
Pinkerton, A. Alan, 1300–3
Pisaniello, Dino L., 699–704
Pitteri, Bruno, 220–3
Pizzotti, Maddalena, 2060–7
Platt, Andrew E. G., 1036–41
Podd, Barry D., 1461–6
Poe, Antony, 1135–41
Poilblanc, Rene, 539–44
Pombeiro, Armando J. L., 492–8
Poon, Chung Kwong, 128–33, 756–62
Porri, Lido, 1961–4
Porta, Francesca, 2060–7
Porta, Piero, 1272–6
Porte, Andrew L., 1012–16
Porzio, William, 1098–100
Potvin, Claude, 192–5
Poveda, Manuel L., 2108–16
Power, Philip P., 2428–33
Pratt, John M., 2259–66, 2267–73, 2274–81
Preti, Carlo, 1467–70
Protas, Jean, 2081–9
Pugh, Nicholas J., 659–66
Puxeddu, Anna, 1489–93
Pye, Peter L., 90–8

Raithby, Paul R., 99–104, 716–20, 1248–50, 1383–9, 1390–6, 1852–7, 2010–15
Ramachandran, Kolikkara, 840–4
Ramdas, Vijayalakshmi, 269–75
Ramsden, John N., 1390–6
Randaccio, Lucio, 220–3, 369–75 1511–14
Rankin, David W. H., 603–6, 954–7, 1374–8, 1768–70, 2049–50
Rao, C. N. Ramachandra, 837–9 1397–400
Raston, Colin L., 440–6, 1921–7, 1928–31
Rasyid, Usman, 2125–8
Rattue, Jennifer A., 2095–101
Ray, Noel, 1105–11, 1342–8
Raynor, J. Barrie, 1731–3, 2388–94, 2425–7
Real, Fernando Mayor, 511–18
Reed, David, 196–200, 284–8, 1917–20
Reedijk, Jan, 2121–4
Regan, Catriona M., 2053–9
Reichenbach, Gustavo, 634–7
Rest, Anthony J., 419–22
Rest, Antony J., 167–73, 1803–8, 2323–32
Reveco, Patricio, 1487–8
Reynolds, David M., 407–11, 412–15
Reynolds, Philip A., 2333–8, 2339–47, 2348–53
Rheinberger, Volker M., 1022–8
Ribola, Dominique, 55–8
Ricard, Louis, 2522–5
Rice, David A., 2075–80, 2503–8
Ricevuto, Vittorio, 2044–5
Richards, Keith M., 2075–80, 2503–8
Richards, Raymond L., 492–8
Ridge, Brian, 1228–35
Rieger, Philip H., 1731–3
Riera, Victor, 552–8
Riley, Brian F., 705–8
Riley, Paul I., 90–8
Ritter, Terence J., 216–19
Rizzarelli, Enrico, 369–75
Roberts, Andrew J., 262–8
Roberts, Nicholas K., 1567–71
Robinson, Ward T., 248–52
Rogers, Robin D., 229–34, 1032–5, 2108–16
Rossetti, Rosanna, 46–51
Rossotti, Francis J. C., 597–602, 813–16, 2147–50, 2151–4
Rothwell, Ian P., 1259–64, 1974–82
Rouse, Keith D., 1248–50
Rowan, Anthony J., 503–10, 1845–51
Rush, James D., 2354–9
Russell, David R., 1682–7, 1737–42, 2294–6
Russo, Elio, 1511–14
Russo, Maria V., 1958–60
Russo, Umberto, 646 53, 2303–5
Rycroft, David S., 321–6, 1858–62, 2434–41
Rydon, H. N., 1228–35
Saba, Giuseppe, 2090–4
Sabatini, Antonio, 519–25
Said, Farouq F., 1161–3
Sales, Keith D., 2476–9
Sampson, Hazel A., 949–53
Samuel, Edmond, 2425–7
Sanchez, Magalis O., 1461–6
Sansoni, Mirella, 52–4, 163–6
Santappa, Muchi, 1312–16, 2138–42
Saporta, Manuela, 570–3
Sarode, Prabhakar R., 837–9
Sawkins, Lynne C., 1992–2000
Sawyer, Jeffery F., 115–20
Sbriziolo, Carmelo, 41–5
Scheller, Kurt H., 1022–8
Schiavon, Gilberto, 2288–93
Schilling, Michael D., 1716–21
Schlemper, Elmer O., 750–5
Schrobilgen, Gary J., 1898–903
Schwarzenbach, Dieter, 1300–3
Scibona, Giancarlo, 1324–7
Secco, Fernando, 1124–8
Seeber, Renato, 979–83
Selwood, Michael J., 1872–8
Shackleton, Stephen L., 1939–44
Shakir, Riz, 1253–8
Sharma, Devendra N., 1526–31
Sharp, David W. A., 2434–41
Shaw, Bernard L., 59–63, 64–9, 299–301, 302–7, 1992–2000, 2282–7, 2309–11, 2312–14
Shaw, Robert A., 840–4, 1012–16
Siganporia, Nauzer, 2155–61
Sigel, Helmut, 1022–8
Sik, Vladimir, 1169–74, 1175–81 2208–19, 2220–7
Silvestri, Arturo, 1983–7
Simandi, Laszlo I., 276–83
Simmons, Miriam G., 1827–37
Simoni, Jose de A., 156–8
Simoyi, Reuben H., 2250–4
Simpson, Stephen J., 29–40
Sinn, Ekkehard, 786–9
Sivasankaran Nair, Madhavan, 1312–16
Skelton, Brian W., 447–53, 454–8 1091–7, 1556–66, 1567–71, 2199–207
Slim, David R., 289–91, 481–3
Smart, Lesley E., 292–8, 962–72
Smith, Andrew R. P., 2333–8
Smith, Graham, 149–55, 1091–7, 2199–207, 2462–6
Smith, J. David, 2493–7
Smith, John M. A., 1945–57
Smith, Kenneth G., 1872–8
Smith, Kevin M., 526–34
Smith, Nigel R. M., 937–41, 1457–60
Smith, Thomas D., 1297–9, 2517–21
Smith, W. Ewen, 767–70
Soares, Allan B., 1101–4
Solomun, Tihomir, 317–20
Somers, Karen R., 579–85
Son, S., 1029–31
Sostero, Silvana, 1182–5, 1324–7
Sowerby, D. Bryan, 1292–6
Spalding, Trevor R., 1236–42, 1251–2
Spek, Anthony L., 1352–8
Spencer, John L., 659–66, 1200–7 1208–19, 1220–7, 2095–101, 2170–81, 2182–90
Spencer, Neil, 1939–44, 1945–57
Spiro, Michael, 854–9, 860–4
Srisankar, Elappulli V., 675–80
Stamper, John G., 2493–7
Stanghellini, Pier L., 46–51
Stanley, David R., 121–7, 2032–8
Stansfield, Robert F. D., 2182–90
Staves, John, 790–6
Stedman, Geoffrey, 1487–8
Steger, Wolfgang, 1768–70
Stephens, F. S., 186–91
Stephenson, T. Anthony, 804–9
Stilbs, Peter, 1142–4
Stobart, Stephen R., 159–62, 224–8
Stone, F. Gordon A., 235–9, 545–51, 552–8, 659–66, 1186–99, 1200–7, 1208–19, 1220–7, 1593–600, 1601–8, 1609–14, 1615–24, 1625–9, 1779–88, 1789–90, 2095–101, 2170–81, 2182–90
Stone, John A., 2488–92
Strumolo, Donatella, 52–4
Stufkens, Derk J., 1328–35, 1336–41
Sykes, A. Geoffrey, 14–18, 19–23 1101–4, 2533–5
Sylva, Ronald N., 1577–81
Symons, Martyn C. R., 709–11, 1682–7
Szekely, Tamas, 2068–74
Szeverenyi, Zoltan, 276–83
Tabbiner, Barbara A., 1945–57
Tabner, Brian J., 1379–82
Takegami, Yoshinobu, 429–34
Tamaura, Yutaka, 825–8, 2125–8
Tan, Cheng H., 1297–9
Tanida, Midori, 726–30
Tapuhi, Eliana, 1124–8
Tarli, Franco, 499–502, 1087–90 1893–7
Tasker, Peter A., 1664–7
Taylor, Christine R., 1945–57
Taylor, David J., 167–73, 1803–8
Taylor, David R., 851–3
Taylor, Donald, 1928–31
Taylor, Graham E., 2162–9
Taylor, John C., 2006–9
Taylor, R. Craig, 1101–4
Tennyson, Jonathan, 2395–400
Terreros, F. Pilar, 1408–15
Thomas, Martyn D. O., 2182–90
Thomas, Patrick D. P., 1374–8
Thompson, David G., 321–6, 928–36, 1858–62
Thompson, David W., 1265–8
Thomson, Andrew J., 1910–16
Thomson, Mary A., 804–9
Thornback, John R., 174–9
Thornton-Pett, Mark, 2315–17
Timms, Peter L., 991–5, 1401–7
Tirant, Selwyn, 2517–21
Tiripicchio, Antonio, 1893–7
Tobias, R. Stuart, 1693–7
Toma, Henrique E., 471–5
Tomas, Milagros, 888–94
Tom Dieck, Heindirk, 786–9
Tomlinson, Gustav, 1342–8
Toniolo, Luigi, 1098–100
Torrens, Hugo, 2434–41
Tosi, Giuseppe, 1467–70
Traeger, Ulrich, 2498–502
Traverso, Orazio, 1182–5, 1324–7
Tremmel, Janos, 87–9
Trooster, Jan M., 201–4
Troup, Jan M., 2300–2
Tsai, James Hwa San, 1791–3
Tuck, Dennis G., 1161–3
Tucker, B. Joly, 262–8, 2042–3
Tucker, John N., 2102–7
Tucker, Paul A., 1737–42
Turney, Terence W., 80–6
Ugo, Renato, 1655–63
Underhill, Allan E., 360–2
Uson, Rafael, 888–94
Vacca, Alberto, 519–25
Valle, Giovanni, 2303–5
Van Attekum, Paul M. Th. M., 201–4
Van de Grampel, Johan C., 1012–16
Van Koten, Gerard, 1352–8
Van Ooijen, Johannes A. C., 2121–4
Vargha, Anna, 2068–74
Varghese, Jose N., 2333–8
Vegas, Angel, 1812–15
Venturini, Marcella, 1124–8
Verhoeckx, Godefridus J., 1352–8
Vichi, Eduardo J. S., 1135–41
Visca, Mario, 1655–63
Vitali, Dario, 1965–9
Vitulli, Giovanni, 1961–4
Waddington, Thomas C., 821–4, 1036–41, 1164–8, 2401–4
Wade, Kenneth, 1164–8
Wainwright, Kevin P., 2117–20
Walker, Brian S., 2318
Walker, Jonathan J., 1809–11
Walker, Thomas E., 1668–73
Walsh, Bernadette, 681–9
Walton, Erick G., 845–50
Watanabe, Hiroyoshi, 429–34
Watanabe, Yoshihisa, 429–34
Watari, Fumio, 2016–19
Watson, Lewis, 767–70
Waugh, A. Bruce, 2006–9
Weakley, Timothy J. R., 949–53, 2051–2
Weber, Harald, 423–5
Webley, Wayne S., 2255–8
Welch, Alan J., 80–6, 1186–99, 1674–81
Wells, Cecil F., 1494–501, 1532–6 2143–6, 2405–9
Wernberg, Ole, 973–8
White, Allan H., 440–6, 447–53, 454–8, 1091–7, 1556–66, 1567–71, 1921–7, 1928–31, 1932–8, 2199–207
White, Colin, 829–36
White, James W., 2129–37
Wilkins, Cuthbert J., 248–52
Wilkinson, Geoffrey, 55–8, 174–9, 229–34, 334–44, 467–70 511–18, 901–10, 1771–8, 1797–9, 1863–71, 1879–87, 1888–92, 2315–17, 2467–75, 2480–7
Williams, Alan D., 1482–6
Williams, Alan F., 1791–3
Williams, Geoffrey A., 1515–25, 1688–92, 2333–8, 2339–47, 2348–53
Williams, Robert J. P., 597–602, 813–16, 2147–50, 2151–4
Willis, Sheila, 186–91
Wilson, Lon J., 1827–37
Winfield, John M., 2001–5
Wong, Herbert, 786–9
Wong, Kenneth, 1248–50
Wood, David J., 360–2
Woodhams, Frank W. D., 2241–5
Woods, Michael, 840–4
Woodward, Peter, 80–6, 292–8, 559–64, 659–66, 962–72, 1710–15, 2182–90
Woolf, Alfred A., 817–20
Woollins, J. Derek, 1910–16
Wright, John G., 1768–70, 2049–50
Yamaguchi, Sachiko, 2536–8
Yavari, Ahmad, 262–8
Yong, Shim Hian, 248–52

Young, G. Brent, 901–10, 1863–71, 1879–87
Youngless, Tim L., 1416–18
Zanella, Fierino, 1324–7
Zannini, Paolo, 1467–70
Zaworotko, Michael J., 229–34
Zeigerson, Esther, 1243–7
Zimmerman, Donald N., 709–11
Ziolo, Ronald F., 2300–2
Zuccaro, Camillo, 99–104, 716–20

SUBJECT INDEX, 1980

ABSTRACTION
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
ACCELERATOR
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2).EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
ACETAMIDE
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
A combined neutron and x–ray diffraction study of hydrogenbis(N-N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
Derivatives of acetamide containing difluorophosphino groups, 1768–70
ACETATE
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine–coordinate $[M(\text{bidentate ligand})_3(\text{unidentate ligand})_3]^{3+}$ system, 454–8
A structural model for Lewis acids and bases. An analysis of the structural chemistry of the acetate and trifluoroacetate ions, 1118–23
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
ACETATOZINCATE
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
ACETONITRILE
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
ACETOXYOXOBUTENEDIYL
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
ACETYLACETONATE
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
ACETYLCYCLOHEXADIENYLIRON
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
ACETYLENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
ACETYLMANGANESE
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
ACETYLPYRIDINE
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
The synthesis, properties, and the crystal and molecular structures of five–coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
ACETYLPYRIDINEPYRIDYLHYDRAZONE
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 1. 2,6–Diacetylpyridine bis(2'–pyridylhydrazone) 459–66
ACID
Stereoselectivity in the ternary complexes copper(II)–N–benzyl–L–proline–D– or L–α–amino acids, 76–9
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Mass spectral investigations on benzeneseleninic acid, 1467–70
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
Kinetics of the oxidation of 2–hydroxy–2–methylpropanoic acid by aquavanadium(V) ions in aqueous perchlorate media, 2143–6
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
Kinetics of base hydrolysis of α–amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics and mechanism of the hydrolysis of α–amino acid esters in mixed ligand complexes with copper(II) ethylenediaminemonoacetate, 2452–5
ACIDITY
A structural model for Lewis acids and bases. An analysis of the structural chemistry of the acetate and trifluoroacetate ions, 1118–23
ACRYLATE
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
ACRYLONITRILE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
ACRYLOYLFERRATE
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides

ACRYLOYLFERRATE(contd)
giving 1:1 adducts, the 2-acyloxy-1,1-dicarbonyl-1-haloferracyclopent-2-en-5-onates, 429–34
ACYL
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di-μ-chlorobis[bis(carbonyl)trimethylphosphine(1-2-η-trimethylsilylmethylcarbonyl)-molybdenum(II)], 229–34
Reaction of 1-3-(η-acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2-acyloxy-1,1-dicarbonyl-1-haloferracyclopent-2-en-5-onates, 429–34
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high-spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Carbon-oxygen and carbon-hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5\text{-}C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
ACYLPYRIDINE
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high-spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
ADAMANTOXIDE
Preparation and properties of 1-adamantoxides, 2-adamantoxides, and 1-adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1-adamantoxo)dimethylaminemolybdenum(IV), 901–10
ADAMANTYL
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
ADAMANTYLMAGNESIUM
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
ADAMANTYLMETHOXIDE
Preparation and properties of 1-adamantoxides, 2-adamantoxides, and 1-adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1-adamantoxo)dimethylaminemolybdenum(IV), 901–10
ADAMANTYLMETHYL
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
ADDN
Reaction of 1-3-(η-acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2-acyloxy-1,1-dicarbonyl-1-haloferracyclopent-2-en-5-onates, 429–34
The cyanobis(1,10-phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
endo Addition to dienylium metal complexes, 1135–41
The oxidative addition of allylic halides to bis(cycloocta-1,5-diene)platinum; dynamic behavior of σ- and 1-3-η-allyl(cycloocta-1,5-diene)platinum complexes, 1200–7
Mechanistic studies of some oxidative-addition reactions: free-radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Hydration, hydrolysis, and dissociation of a nickel(II) bromide-quinoline complex, 2046–8
ADDUCT
Ionic-covalent equilibriums in boron trihalide adducts. The $BF_2(hmpa)_2^+$ cation, 1142–4
The interaction of amines with iron pentacarbonyl, 1461–6
Fluoride crystal structures. Part 34. Antimony pentafluoride-iodine trifluoride dioxide, 1734–6
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4-trifluoro-1-(2-thienyl)butane-1,3-dionate through adduct formation with cinchona alkaloids, 2369–73
ADENOSYLCOBALAMIN
Interaction of cis-diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
AIBN
Mechanistic studies of some oxidative-addition reactions: free-radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
ALC
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Interaction of allylic alcohols with halo-bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Molybdenum(VI) complexes from diols and aminoalcohols: the occurrence of molybdenum dioxide and dimolybdenum tri- and pentoxide core structures, 248–52
Initial state and transition state effects in the mercury(II)-catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido-, dinitrogen-, and ethyleneiron complexes, 705–8
Reactivity of new azido complexes of titanium and vanadium, 1800–2
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
ALDOL
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal-coordinated glycine, 1655–63
ALDOXIME
Selective cleavage of the two types of Pd-N bonds in di-μ-halobis[arylazooximatopalladium(II)], 1698–702
ALIPH
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2-aminoethyl)amine, bis(3-aminopropyl)amine, and 2-aminoethyl(3-aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
ALKADIENE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5-indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5-indenyl(1-2:3-4-η^4-[6-endo-propen-2-yl-1,2,3,4-tetrakis(trifluoromethyl)cyclohexa-1,3-diene])rhodium formed in a cyclo-cotrimerisation reaction, 962–72
Kinetics and mechanism of mono- and diolefin exchange at five-coordinate iron(0), 999–1004
ALKALI
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
Solubilities and Setchenow coefficients for bis(2,2'-bipyridyl)dicyanoiron(II) and dicyanobis(5-nitro-1,10-phenanthroline)iron(II) in aqueous salt solutions, 616–19
Soft-sphere ionic radii for alkali and halogenide ions, 645
Electrochemical studies on alkali-metal complexes with the small macrocycle 1,4,7,10-tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
One-electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4

ALKALI(contd)
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
ALKALOID
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4–trifluoro–1–(2–thienyl)butane–1,3–dionate through adduct formation with cinchona alkaloids, 2369–73
ALKANETHIOL
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
ALKANETHIOLATOTUNGSTEN
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
ALKENE
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
ALKENONE
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
ALKOXIDE
Exchange interaction in tetrameric oxygen–bridged copper(II) clusters of the cubane type, 875–9
Thallium–205 nuclear magnetic resonance spectra of thallium(I) alkoxides, 1439–42
ALKOXY
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
ALKOXYCARBONYL
Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19
ALKOXYCYCLOHEXADIENE
endo Addition to dienylium metal complexes, 1135–41
ALKOXYRHENIUM
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
ALKYL
Reactions of $[Fe_2(\eta\text{–dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]$I, 186–91
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N–alkylphenothiazines, 484–6
Multinuclear magnetic resonance studies. Part 4. Tetraalkyldiphosphines with bulky substituents, 638–44
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–R'SO_2X reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
Mass spectrometry of compounds of the type $[Fe(CO)_2(\eta\text{–}C_5H_5)R]$ (R = alkyl), 2488–92
ALKYLACETYLENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
ALKYLATION
Reactions of $[Fe_2(\eta\text{–dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]$I, 186–91
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
ALKYLCOBALAMIN
Interaction of cis–diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
ALKYLCYCLOBUTADIENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
ALKYLDIPHOSPHINE
Multinuclear magnetic resonance studies. Part 4. Tetraalkyldiphosphines with bulky substituents, 638–44
ALKYLIRON
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
ALKYLNITROSOANILINE
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N–alkyl–N–nitrosoanilines, 2282–7
ALKYLPHENOTHIAZINE
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N–alkylphenothiazines, 484–6
ALKYLQUINOLINE
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
ALKYLTIN
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
ALKYNE
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Alkyne complexes of platinum. Part 4. Stepwise formation of di– and triplatinum complexes with bridging alkyne ligands; crystal structure of cd–bis(μ–diphenylacetylene)–abef–tetrakis(triethylphosphine)triplatinum, 2182–90
ALKYNOL
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
ALKYNYL
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60

ALLYL
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
Consecutive substitution in, and reduction of, η–allyl molybdenum–(II) complexes, and a study of ligand exchange in a molybdenum–(0) product, 565–9
The oxidative addition of allylic halides to bis(cycloocta–1,5–diene)platinum; dynamic behavior of σ– and 1–3–η–allyl(cyclooc-ta–1,5–diene)platinum complexes, 1200–7
Ligand substitution reactions of neutral and cationic allyl(cycloct-a–1,5–diene)platinum complexes, 1208–19
The synthesis, reactions, and dynamic behavior of allyl(cyclopenta-dienyl)platinum complexes, 1220–7
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarb-onylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3-)H]$, 1852–7
Intramolecular rearrangement in η–allyl complexes of molybdenum-(II) containing unidentate amine ligands, 1904–9
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Preparation, mechanism of formation, structure, and reactions of η–allyl complexes of ruthenium(II), 2418–24
ALLYLACETATE
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
ALLYLCOBALT
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
ALLYLMOLYBDENUM
Consecutive substitution in, and reduction of, η–allyl molybdenum-(II) complexes, and a study of ligand exchange in a molybdenum-(0) product, 565–9
ALUMINATE
A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400
ALUMINUM
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Group 3A tetrahydroborates. Part 3. The molecular structure of methylaluminum bis(tetrahydroborate) in the gas phase as determined by electron diffraction, 1374–8
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxyl-amido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
AMBERLYST
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
AMIDE
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
AMIDO
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
Preparation, properties, and crystal structures of the monochlorotr-is[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
AMIDOAMINE
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
AMINE
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis– and trans–ruthenium(II) amine complexes, 128–33
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Polar and steric effects in the stability of silver complexes of primary amines, 416–18
Structural and mechanistic studies of coordination compounds. Part 25. Synthesis and characterization of some octahedral haloamine and –thioether complexes of ruthenium(II) and –(III), 756–62
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
Studies of phosphazenes. Part 10. Spirocyclic derivatives of cyclotriphosphazatrienes, 840–4
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Gas–phase molecular structure of bis(difluorophosphino)amine, determined by electron diffraction, 954–7
Kinetics of ligand exchange between ethylenedinitrilotetraacetatoc-uprate(II) and triethylenetetraaminecadmium(II), 958–61
Crystal structure of bis(2–aminoethyl)amine(di–2–pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)–doped system, 1105–11
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Crystal structure and electronic properties of ammine[tris(2–aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
Crystal and molecular structure of $SnMePh[C_{10}H_5(OMe-5)(CH_2NMe_2-8)]Br$ and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides $SnRR'[C_{10}H_5(OMe-5)(CH_2NMe_2-8)]X$ and $SnRR'[CH_2C_6H_4(CH_2NMe_2-2)]X$, 1352–8
The interaction of amines with iron pentacarbonyl, 1461–6
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
AMINO
Stereoselectivity in the ternary complexes copper(II)–N–benzyl–L–proline–D– or L–α–amino acids, 76–9
Molybdenum(VI) complexes from diols and aminoalcohols: the

AMINO(contd)
occurrence of molybdenum dioxide and dimolybdenum tri- and pentoxide core structures, 248–52
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
Kinetics of base hydrolysis of α-amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics and mechanism of the hydrolysis of α-amino acid esters in mixed ligand complexes with copper(II) ethylenediaminemonoacetate, 2452–5
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α-hydroxybenzylidenehydrazone(2–)-N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
AMINOALC
Molybdenum(VI) complexes from diols and aminoalcohols: the occurrence of molybdenum dioxide and dimolybdenum tri- and pentoxide core structures, 248–52
AMINOCYCLODIPHOSPHAZANE
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
AMINOCYCLOHEXANE
Thermochemistry of metal complexes with the rigid ligand 1,3,5-cis,cis-triaminocyclohexane, 1055–9
AMINOCYCLOHEXANETETRAACETATE
Natural abundance nitrogen-15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans-1,2-diaminocyclohexane-N,N,N',N'-tetraacetate ion and 1,4,8,11-tetraazacyclotetradecane, 721–5
AMINODIFLUOROPHOSPHORANE
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
AMINODITHIADECANE
The synthesis, properties, and the crystal and molecular structures of five-coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
AMINOETHANOL
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2-diethylaminoethanolato)copper(II)]-tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
AMINOETHANOLATOCOPPER
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2-diethylaminoethanolato)copper(II)]-tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
AMINOETHYLAMINE
Comparison of structure and reactivity of bis(2-aminoethyl)amine- and bis(2-aminoethyl)amidochlorogold(III) complexes, 220–3
Crystal structure of bis(2-aminoethyl)amine(di-2-pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)-doped system, 1105–11
AMINOMETHYLALKANE
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
AMINOMETHYLIDYNE
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
AMINOTRITHIAUNDECANE
Bivalent metal complexes of 1,11-diamino-3,6,9-trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
AMMINE
Intramolecular charge-transfer decomposition of the μ-peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans-substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner-sphere versus outer-sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis- and trans-ruthenium(II) amine complexes, 128–33
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ-bonding systems, 345–8
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Initial state and transition state effects in the mercury(II)-catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Studies in Moessbauer spectroscopy. Part 13. Iodine-129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Crystal structure and electronic properties of ammine[tris(2-aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
Ab-initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Interaction of cis-diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro- and bromo-pentaamminecobalt(III) and of -pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2-diaminoethane substituted complexes, 2228–36
Mercury(II)- and nitrosyl-induced aquation of anionopentaamminecobalt(III) species. Reactions of the t-$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido-bridged complexes of osmium and ruthenium, 2410–14
AMMINERUTHENIUM
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
AMMONIUM
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
Solubilities and Setchenow coefficients for bis(2,2'-bipyridyl)dicyanoiron(II) and dicyanobis(5-nitro-1,10-phenanthroline)iron(II) in aqueous salt solutions, 616–19
Optimized synthesis and mechanism of formation of 2,4-dichloro-1,3-bis(dichlorophosphoryl)-2,4-dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
ANGLE
On the vibrational assignment and bond angles in chromyl fluoride 535–8
ANHYDRIDE
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ-fluoro-μ-trifluoroacetato-bis[tetrafluoroantimony(V)] and of μ-oxo-di-μ-trifluoroacetato-bis[trifluoroantimony(V)], 109–14
ANILINE
Pentamethylcyclopentadienylrhodium and -iridium complexes. Part 26. Dicationic η^5-aniline and η^6-anisole complexes, 1048–54
ANION
One-electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Preparation of the sixteen-atom ring chelates trans-$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans-

ANION(contd)
$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
ANISOLE
Pentamethylcyclopentadienylrhodium and –iridium complexes. Part 26. Dicationic η^5–aniline and η^6–anisole complexes, 1048–54
ANSERINE
Multiple forms of the copper(II)–carnosine complex, 590–6
ANTIMONY
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
An antimony–121 Moessbauer spectroscopic study of some dihalo(halo–substituted benzene–1,2–diolato)antimonate(III) complexes and of some tetrabromoantimonates(III), 1542–4
Fluoride crystal structures. Part 34. Antimony pentafluoride–iodine trifluoride dioxide, 1734–6
Antimony–121 Moessbauer investigations of tin–antimony oxides, 2241–5
AQ
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
AQUA
The N–M–N bond angle in the chelate ring of ethylenediamine. The crystal structure of tetraaqua(ethylenediamine)nickel(II) nitrate, 654–8
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–dioxane(1/3), di–μ–hydroxobis[aquatrichlorotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatribromotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatrichlorotin(IV)]–water(1/4), and cis–diaquatetrachlorotin(IV)–water(1/3) 949–53
Crystal structure of tetra(glycolato)uranium(IV) dihydrate, a photoreduction product of uranyl ions in the presence of glycolic acid, 1182–5
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
AQUAION
Electron relaxation rates of lanthanide aqua cations, 2147–50
AQUAIRON
Kinetics of oxidation of aquairon(2+) by iodate in dilute perchloric acid solution, 797–803
AQUATION
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis– and trans–ruthenium(II) amine complexes, 128–33
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
AQUEOUS
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
AQUOION
Electron relaxation rates of lanthanide aqua cations, 2147–50
ARENE
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
AROYLHYDRAZIDO
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2\text{-}p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
AROYLHYDROXYLAMIDO
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2\text{-}p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
ARSENATE
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
ARSENIC
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
ARSINE
The trans influence and trans effect of the arsine group. The x–ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type $[Co(SiR_3)(CO)_nL_{4-n}]$, 923–7
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structures of three palladium complexes with ortho–phenylenebis(methylphenylarsine) ligands, 1556–66
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
Preparation, mechanism of formation, structure, and reactions of η–allyl complexes of ruthenium(II), 2418–24
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
ARSINYL
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
ARSONIUM
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
ASSOCN
Proton nuclear magnetic resonance study of the self–association of 1,10–phenanthroline, 2,2'–bipyridyl, and their zinc(II) complexes 1079–86
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
ATOM
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
ATTACK
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
AZA
Encircling of metal ions by tetraaza macrocycles. Enthalpies of formation of high– and low–spin nickel(II) complexes of 14–membered ligands, 134–6
AZABUTADIENE
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7

AZACYCLOOCTADECANE
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
AZACYCLOTETRADECANE
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
AZACYLOOCTADECANE
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
AZAOCTANEDIAMINE
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
AZIDE
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Reactivity of new azido complexes of titanium and vanadium, 1800–2
AZIDO
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
AZIDOPENTAFLUOROTUNGSTEN
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
AZOLE
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
B12
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
BARIUM
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
BARRIER
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
BASE
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
BASIC
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
BASICITY
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
A structural model for Lewis acids and bases. An analysis of the structural chemistry of the acetate and trifluoroacetate ions, 1118–23
BENZENE
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5\text{–}C_5Me_4Et)(\eta^5\text{–}C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
Mass spectral investigations on benzeneseleninic acid, 1467–70
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
BENZENEDIOLATE
An antimony–121 Moessbauer spectroscopic study of some dihalo(halo–substituted benzene–1,2–diolato)antimonate(III) complexes and of some tetrabromoantimonates(III), 1542–4
BENZENESELENINIC
Mass spectral investigations on benzeneseleninic acid, 1467–70
BENZIMIDAZOLE
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2).EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
BENZOCROWN
Crystal structures of complexes between alkali metal salts and cyclic polyethers. Part 11. Complexes formed between 2,3,5,6,8,9,11,12–octahydro–1,4,7,10,13–benzopentaoxacyclopentadecin (benzo–15–crown–5) and sodium perchlorate (1:1), sodium perchlorate (2:1), and sodium tetraphenylborate (2:1), 1066–75
BENZOTHIAZOLETHIOLATO
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2).EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
BENZOTHIAZOLETHIOLATOZINC
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
BENZOXAZOLETHIOLATO
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2).EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
BENZOYLHYDRAZOATE
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
BENZOYLHYDRAZONE
Reactivity of uranyl ion with quinquedentate chelating hydrazine

BENZOYLHYDRAZONE(contd)
derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
BENZOYLHYDROXYLAMIDO
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2\text{–}p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
BENZOYLMETHANATE
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
BENZOYLPLATINUM
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
BENZYL
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Crystal and molecular structure of $SnMePh[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]Br$ and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides $SnRR'[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]X$ and $SnRR'[CH_2C_6H_4(CH_2NMe_2\text{–}2)]X$, 1352–8
BICYCLOHEPTYL
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
BICYCLOOCTYL
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
BICYCLOPENTADIENYL
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
BIDECABORANYL
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'–bi(nido–decaboranyl) and 2,6'–bi(nido–decaboranyl), 790–6
BINDING
Transition metal binding sites and ligand parameters, 2032–8
BIOL
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido–bridged complexes of osmium and ruthenium, 2410–14
BIPYRIDINE
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
BIPYRIDYL
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Properties and structural characterization of copper(II) mixed complexes with 2,2'–bipyridyl and iminodiacetate or pyridine–2,6–dicarboxylate, 369–75
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
Proton nuclear magnetic resonance study of the self–association of 1,10–phenanthroline, 2,2'–bipyridyl, and their zinc(II) complexes 1079–86
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
BISMUTH
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals •MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
BISMUTHATE
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
BLOOD
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
BOND
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
On the vibrational assignment and bond angles in chromyl fluoride 535–8
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
A study of copper compounds by x–ray absorption spectroscopy, 837–9
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Chlorine–35 nuclear quadrupole resonance studies on some tin(IV) chloride adducts, 1164–8
Bonding studies of derivatives of pentaborane(9) through self–consistent charge calculations, 1236–42
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ–tolylidyne groups; crystal structure of $[PtW(\mu\text{–}C\text{–}C_6H_4Me\text{–}p)(CO)_2(PMe_2Ph)_2(\eta\text{–}C_5H_5)]$, 1609–14
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of $[Pt_2W(\mu\text{–}C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of $[MnPt(\mu\text{–}I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]]$, 1625–9

BOND(contd)
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5\text{–}C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo- and dialkylamidorhenium compounds. Structures of di-μ-methoxotetramethoxo-μ-oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans-tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
Multinuclear magnetic resonance studies on μ-hydrido-μ-hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di-μ-hydridodihydridohexakis(trimethylphosphine-)diruthenium(II) and tri-μ-hydridohexakis(trimethylphosphine)-diruthenium(II) tetrafluoroborate, 2480–7
BORANE
Bonding studies of derivatives of pentaborane(9) through self-consistent charge calculations, 1236–42
BORATE
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3\text{–}B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)\text{–}BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_2(NCCH_3)_4]$, 1917–20
BOROHYDRIDE
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24-tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Group 3A tetrahydroborates. Part 3. The molecular structure of methylaluminum bis(tetrahydroborate) in the gas phase as determined by electron diffraction, 1374–8
BORON
Ionic–covalent equilibriums in boron trihalide adducts. The $BF_2(hmpa)_2^+$ cation, 1142–4
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
BRIDGE
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido–bridged complexes of osmium and ruthenium, 2410–14
BRIDGED
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ-hydroxo-μ-peroxodicobalt(III) complexes, 2533–5
BRIDGEHEAD
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
BROMIDE
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Comparison of structure and reactivity of bis(2-aminoethyl)amine- and bis(2-aminoethyl)amidochlorogold(III) complexes, 220–3
Solubilities and Setchenow coefficients for bis(2,2'-bipyridyl)dicyanoiron(II) and dicyanobis(5-nitro-1,10-phenanthroline)iron(II) in aqueous salt solutions, 616–19
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Reaction of electrogenerated NN'-ethylenebis(salicylideneiminato)-cobaltate(I) with tert-butyl bromide and tert-butyl chloride, 1489–93
Effects of added alkali metal and alkylammonium bromides on the kinetics of reaction between the $[PdCl(Et_2N(CH_2)_2NH(CH_2)_2N\text{-}Et_2)]^+$ cation and bromide ion in aqueous solutions, 1809–11
Solutions of hydrogen bromide in sulfolane, 2028–31
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
BROMINATION
Synthesis and chemistry of some palladacyclopentanes, 1633–7
BROMINE
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
BROMO
Structures of di-μ-hydroxobis[aquatrichlorotin(IV)]-1,4-dioxane(1/3), di-μ-hydroxobis[aquatrichlorotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatribromotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatrichlorotin(IV)]-water(1/4), and cis-diaquatetrachlorotin(IV)-water(1/3) 949–53
Preparation of the complexes trans-$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
BROMOALKANE
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem-dibromides, and from condensation of hydrazido(2-) complexes with aldehydes, 771–5
Reactions of trans-bis[1,2-bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and -molybdenum with α,ω-dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
BROMOANTIMONATE
An antimony-121 Moessbauer spectroscopic study of some dihalo(halo-substituted benzene-1,2-diolato)antimonate(III) complexes and of some tetrabromoantimonates(III), 1542–4
BROMOBUTANE
Reaction of electrogenerated NN'-ethylenebis(salicylideneiminato)-cobaltate(I) with tert-butyl bromide and tert-butyl chloride, 1489–93
BROMODIFLUOROPHOSPHINE
Derivatives of acetamide containing difluorophosphino groups, 1768–70
BROMOIRIDATE
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
BROMOKETONE
Complexes of nickel(II), palladium(II), and platinum(II) with the β-ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
BROMOMETHYLBENZENE
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$-1,3 and the crystal structure of [2,6-bis(tert-butylthiomethyl)phenyl-C^1,S,S']chloropalladium(II), 2312–14
BROMOPENTANE
Preparation of the sixteen-atom ring chelates trans-$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt; crystal structure of trans-$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
BROMOTRIMETHYLAMMONIUM
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
BROWN
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2-diaminoethane substituted complexes, 2228–36
BUTANEDIONATE
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4-trifluoro-1-(2-thienyl)butane-1,3-dionate through adduct formation with cinchona alkaloids, 2369–73
BUTANEDIYL
Synthesis and chemistry of some palladacyclopentanes, 1633–7
BUTENEDIYL
Crystal and molecular structure of μ-carbonyl-μ-(1-3-η:1-σ,4-2'-η-(1,3-dimethyl-4-[5-oxo-4-phenyl-2(5H)-furan-2-ylidene]but-1-ene-1,3-diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
BUTYL
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert-butyl isocyanide)dicobalt, 80–6
Reaction of electrogenerated NN'-ethylenebis(salicylideneiminato)-cobaltate(I) with tert-butyl bromide and tert-butyl chloride, 1489–93
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Coordination chemistry of (8-methyl-2-quinolylmethyl)di-tert-

BUTYL(contd)
butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of [$PdCl_2$(mqp)], 1974–82
Preparation of the sixteen–atom ring chelates trans–[M_2Cl_4(Me_3CS-$(CH_2)_5SCMe_3)_2$], M = Pd or Pt: crystal structure of trans–[Pd_2Cl_4($Me_3CS(CH_2)_5SCMe_3)_2$], 2309–11
BUTYLAMMONIUM
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of [NEt_4][$Zn(S_2CNMe_2)_3$], R[$Zn(C_7H_4NS_2)_3(OH_2)$], R[$Zn(S_2CNMe_2)_2(C_7H_4NS_2)$].EtOH, and R[$Zn(S_2CNMe_2)(C_7H_4NS_2)_2$] (R = NBu_4), 1945–57
BUTYLATION
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
BUTYLDITHIOCARBAZATE
Synthesis and fluxional character of complexes of the type [$M_2(cp)_2(CO)_3(CNR)$] (M = Fe or Ru, cp = η–C_5H_5), 503–10
BUTYLMETHOXY
Synthesis and properties of bis(tert–butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of LiCr[$OCH(CMe_3)_2]_4$.THF, Cr[$OCH(CMe_3)_2]_4$, and LiFe[$OCH(CMe_3)_2]_4$.$(Me_3C)_2$CHOH, 1863–71
BUTYLPHOSPHINE
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
BUTYLTHIOMETHYLBENZENE
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
BUTYLTHIOPENTANE
Preparation of the sixteen–atom ring chelates trans–[M_2Cl_4(Me_3CS-$(CH_2)_5SCMe_3)_2$], M = Pd or Pt: crystal structure of trans–[Pd_2Cl_4($Me_3CS(CH_2)_5SCMe_3)_2$], 2309–11
BUTYNE
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
CADMIUM
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Kinetics of ligand exchange between ethylenedinitrilotetraacetatocuprate(II) and triethylenetetraaminecadmium(II), 958–61
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
CAFFEINE
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
CALCIUM
Ruthenium–99 and europium–151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Vibrational spectroscopy at very high pressures. Part 26. An infrared study of the metastable phases of $Ca[CO_3]$, 1482–6
CARBABORANE
Metallaborane chemistry. Part 11. Lower rotational barriers in seven–vertex than in twelve–vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo–1,1–$(Et_3P)_2$–2,3–Me_2–1,2,3–$PtC_2B_4H_4$] and [closo–1,1–$(Et_3P)_2$–1,2,4–$PtC_2B_4H_6$], 1186–99
CARBAMOYLETHYLTETRAAZACYCLOTETRADECANE
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
CARBAPLATINABORANE
Metallaborane chemistry. Part 11. Lower rotational barriers in seven–vertex than in twelve–vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo–1,1–$(Et_3P)_2$–2,3–Me_2–1,2,3–$PtC_2B_4H_4$] and [closo–1,1–$(Et_3P)_2$–1,2,4–$PtC_2B_4H_6$], 1186–99
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
CARBENE
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of [$(OC)_5W(\mu$–C(OMe)Ph)$Pt(PMe_3)_2$] (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of [$(OC)_4Mn(\mu$–(1–σ,1–2–η–C:CH–CH_2–CH_2–O))$Pt(PMe_3)_2$] (Mn–Pt), 1601–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of [$Pt_2W(\mu$–C(OMe)Ph)$(CO)_6$[$P(CMe_3)_2Me]_2$], 1615–24
CARBIDE
New carbide clusters in the cobalt sub–group. Part 6. Crystallographic characterization of the tetramethylammonium salt of the paramagnetic anion carbidohexa–μ–carbonyloctacarbonyl–polyhedro–hexacobaltate(1–), 163–6
CARBIDO
Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, [$Cu_2Rh_6(CO)_{15}(NCMe)_2$].0.5MeOH, 52–4
CARBON
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Crystal structure of γ–monoclinic selenium, 624–7
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], [$Hg_2Me_2(S_2C_6H_{10})$], 1471–4

CARBON(contd)
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
CARBONATE
Vibrational spectroscopy at very high pressures. Part 26. An infrared study of the metastable phases of $Ca[CO_3]$, 1482–6
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
CARBONYL
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands $C(OR')R$ [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
New carbide clusters in the cobalt sub–group. Part 6. Crystallographic characterization of the tetramethylammonium salt of the paramagnetic anion carbidohexa–μ–carbonyloctacarbonyl–polyhedro–hexacobaltate(1–), 163–6
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen)cobalt complexes, 167–73
Reactions of $[Fe_2(\eta\text{–dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]I$, 186–91
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3\text{–}B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)molybdenum(II)], 229–34
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with metnyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Complexes of rhodium and iridium with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Improved syntheses of the hexanuclear clusters $[Ru_6(CO)_{18}]^{2-}$, $[HRu_6(CO)_{18}]^-$, and $H_2Ru_6(CO)_{18}$. The x–ray analysis of $[HRu_6(CO)_{18}]^-$, a polynuclear carbonyl containing an interstitial hydrogen ligand, 383–9
Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of $[MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2\text{-})]$ (M = Mo or W; n = 1–3), 440–6
Crystal structures of fac–[bis(2–diphenylphosphinoethyl)phenylphosphine–PP'P'']tricarbonylchromium(0) and –molybdenum(0), 447–53
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Preparation and isomerization of dicarbonyldihalo[o–phenylenebis(dimethylarsine)]osmium complexes, 487–91
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, $[Ru_2(C_8H_8SiMe_2CH_2CH_2SiMe_2)(CO)_5]$ and $[Ru_2(C_8H_8SiMe_3)(SiMe_3)(CO)_4]$, 559–64
Consecutive substitution in, and reduction of, η–allyl molybdenum–(II) complexes, and a study of ligand exchange in a molybdenum–(0) product, 565–9
Synthesis and crystal structure of tetramethylammonium μ–pentachlorothiophenolatobis[pentacarbonyltungstate(0)], 570–3
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)](3Os–Os); preparation and crystal structure, 716–20
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Preparation and carbon–13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17
Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type $[Co(SiR_3)(CO)_nL_{4-n}]$, 923–7
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
Bonding properties of trinuclear metal carbonyls, 1005–11
Nature of the novel $C_{15}H_{15}$ ligand in $[W(CO)_2(\eta^5\text{–}C_5H_5)(\eta^3\text{–}C_{15}H_{15})]$, 1032–5
Aryltriazenido complexes. Crystal and molecular structure of trans–carbonyl(1,3–di–p–tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
endo Addition to dienylium metal complexes, 1135–41
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64

CARBONYL(contd)
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
The interaction of amines with iron pentacarbonyl, 1461–6
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ–tolylidyne groups; crystal structure of $[PtW(\mu\text{–}C\text{·}C_6H_4Me\text{–}p)(CO)_2(PMe_2Ph)_2(\eta\text{–}C_5H_5)]$, 1609–14
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of $[Pt_2W(\mu\text{–}C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of $[MnPt(\mu\text{–}I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]]$, 1625–9
Metal carbonyl photochemistry. Part 1. Photolysis of the Group 6 hexacarbonyls in hydrocarbon glasses; the species $M(CO)_5$, $M(CO)_4$, $M(CO)_3$, and $[M(CO)_5(OH_2)]$, 1646–50
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5\text{–}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) $[BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) $[BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
Protonation of pentakis(tert–butyl isocyanide)iron, 1789–90
Photochemistry of chloro–, bromo–, and iodo–pentacarbonylmanganese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tetracarbonylhalomanganese species with a C_{2v} trigonal–bipyramidal structure, 1803–8
Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5\text{–}C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
Intramolecular rearrangement in η–allyl complexes of molybdenum(II) containing unidentate amine ligands, 1904–9
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)]$, 1992–2000
Transition metal binding sites and ligand parameters, 2032–8
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Kinetics and mechanism of diene exchange at six–coordinate chromium, 2237–40
Synthesis and crystal structure of bis[σ–tricarbonyl(η^5–cyclopentadienyl)manganese]bis(η^5–cyclopentadienyl)titanium, 2315–17
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
Preparation, mechanism of formation, structure, and reactions of η–allyl complexes of ruthenium(II), 2418–24
Mass spectrometry of compounds of the type $[Fe(CO)_2(\eta\text{–}C_5H_5)R]$ (R = alkyl), 2488–92
Phosphaferrocenes as phosphorus ligands. Crystal and molecular structure of tetracarbonyl(3,4–dimethylphosphaferrocene–P)iron 2522–5
CARBONYLATION
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)molybdenum(II)], 229–34
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
CARBORANYL
Insertion of platinum into an ortho–carboranyl boron–hydrogen bond. The crystal and molecular structure of the diphenyl(ortho–carboranyl)phosphine complex $[PtCl(Ph_2PC_2B_{10}H_{10})(Ph_2PC_2B_{10}H_{11})]$, 317–20
CARBORANYLPHOSPHINE
Insertion of platinum into an ortho–carboranyl boron–hydrogen bond. The crystal and molecular structure of the diphenyl(ortho–carboranyl)phosphine complex $[PtCl(Ph_2PC_2B_{10}H_{10})(Ph_2PC_2B_{10}H_{11})]$, 317–20
CARBOXYLATE
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI–)], 289–91
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
CARBYNE
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
CARNOSINE
Multiple forms of the copper(II)–carnosine complex, 590–6
CARRIER
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
CATALYSIS
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73

CATALYST
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
Kinetics of the silver(I)–catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
Antimony–121 Moessbauer investigations of tin–antimony oxides, 2241–5
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8

CATALYTIC
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9

CATION
A combined neutron and x–ray diffraction study of hydrogenbis(N-N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
Synthesis and chemistry of some palladacyclopentanes, 1633–7

CESIUM
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903

CHAIN
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes $[[Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5)_2$ (en = ethane–1,2–diamine and pn = propane 1,2–diamine), 2498–502

CHARCOAL
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9

CHARGE
A study of copper compounds by x–ray absorption spectroscopy, 837–9

CHELATE
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Properties and structural characterization of copper(II) mixed complexes with 2,2'–bipyridyl and iminodiacetate or pyridine–2,6–dicarboxylate, 369–75
Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of $[MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2-)]$ (M = Mo or W; n = 1–3), 440–6
Crystal structures of fac–[bis(2–diphenylphosphinoethyl)phenylphosphine–PP'P'']tricarbonylchromium(0) and –molybdenum(0), 447–53
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine–coordinate [M(bidentate ligand)$_3$(unidentate ligand)$_3$]$^{x\pm}$ system, 454–8
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 1. 2,6–Diacetylpyridine bis(2'–pyridylhydrazone) 459–66
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
Crystal structures of three palladium complexes with ortho–phenylenebis(methylphenylarsine) ligands, 1556–66
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7

CHELATION
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis– and trans–ruthenium(II) amine complexes, 128–33
Encircling of metal ions by tetraaza macrocycles. Enthalpies of formation of high– and low–spin nickel(II) complexes of 14–membered ligands, 134–6
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33

CHLORIDE
Molecular structure of dimeric iron trichloride in the vapor phase as determined by electron diffraction, 87–9

CHLORIDE(contd)
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]$-$Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
Concentration– and solvent–dependent electron spin resonance signals and dimer formation of high–spin iron(III) porphyrins, 526–34
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)–BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
Crystal and molecular structure of molybdenum tetrachloride oxide by neutron and x–ray diffraction, 2006–9
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
CHLORINE
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
CHLORO
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–dioxane(1/3), di–μ–hydroxobis[aquatrichlorotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatribromotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatrichlorotin(IV)]–water(1/4), and cis–diaquatetrachlorotin(IV)–water(1/3) 949–53
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ion, 2339–47
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
CHLOROACETIC
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
CHLOROANTIMONATE
An antimony–121 Moessbauer spectroscopic study of some dihalo(halo–substituted benzene–1,2–diolato)antimonate(III) complexes and of some tetrabromoantimonates(III), 1542–4
CHLOROAURATE
A combined neutron and x–ray diffraction study of hydrogenbis(N-N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
CHLOROCARBON
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
CHLOROCOBALT
Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^3S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot0.5[NH_2NMeC(=S)SMe]$, 1893–7
CHLOROCOBALTATE
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ion, 2339–47
CHLOROCYCLODIPHOSPHAZANE
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
CHLOROCYCLOTRITHIATRIAZENE
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
CHLOROFLUORIDE
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
CHLOROFLUOROMANGANATE
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
CHLOROGOLD
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
CHLOROIODATE
Vibrational and chlorine–35 nuclear quadrupole resonance spectra of some complexes of ICl_4^- and $AuCl_4^-$. Part 1. Two crystal modifications of trichlorosulfonium tetrachloroiodate, $[SCl_3][ICl_4]$, 2401–4
CHLOROIRIDATE
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19

CHLOROMETHYL
Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6
CHLOROMETHYLMERCURY
Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6
CHLOROOXORHENIUM
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo- and dialkylamidorhenium compounds. Structures of di-μ-methoxotetramethoxo-μ-oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans-tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
CHLOROPHENOXYACETATO
Metal–phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)- and diaquabis(p-chlorophenoxyacetato)manganese(II), -cobalt(II), and -magnesium(II), 2462–6
CHLOROPHENYLPHOSPHONIUM
Chlorine-containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
CHLOROPLATINUM
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
The trans influence and trans effect of the arsine group. The x-ray structures of dichloro[diphenyl(o-vinylphenyl)arsine]platinum(II-) and [1-(o-diphenylarsinophenyl)-2-methoxyethyl-As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
CHLOROPYRIDINECOBALT
Kinetics of solvolysis of the trans-dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
CHLOROSULFONIUM
Vibrational and chlorine-35 nuclear quadrupole resonance spectra of some complexes of ICl_4^- and $AuCl_4^-$. Part 1. Two crystal modifications of trichlorosulfonium tetrachloroiodate, $[SCl_3][ICl_4]$, 2401–4
CHLOROTELLURATE
Crystal and molecular structure of bis(N,N'-dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
CHLOROTRIMETHYLAMMONIUM
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
CHROMATE
Synthesis and properties of bis(tert-butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of $LiCr[OCH(CMe_3)-_2]_4.THF$, $Cr[OCH(CMe_3)_2]_4$, and $LiFe[OCH(CMe_3)_2]_4.(Me_3C)_2-CHOH$, 1863–71
Spin density and bonding in the CrF_6^{3-}ion in $K_2Na[CrF_6]$, 2348–53
CHROMATOG
Stereoselectivity in the ternary complexes copper(II)–N-benzyl-L-proline-D- or L-α-amino acids, 76–9
CHROMIUM
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(-I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands $C(OR')R$ [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Infrared and electronic spectra of matrix-isolated chromium(V) trichloride oxide, 419–22
Crystal structures of fac-[bis(2-diphenylphosphinoethyl)phenylphosphine-PP'P"]tricarbonylchromium(0) and -molybdenum(0), 447–53
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6-naphthalene)chromium(0) and its arene replacement reactions, 991–5
Temperature- and wavelength-dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, -molybdenum, and -tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{-}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo-diplatinum-chromium and -tungsten complexes. Crystal structure of $[Pt_2W(\mu\text{-}C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x-ray crystal structure of $[(Fe(CO)_3[\eta^5-C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one-electron oxidant, 1710–15
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro- and bromo-pentaamminecobalt(III) and of -pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Synthesis and properties of bis(tert-butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of $LiCr[OCH(CMe_3)-_2]_4.THF$, $Cr[OCH(CMe_3)_2]_4$, and $LiFe[OCH(CMe_3)_2]_4.(Me_3C)_2-CHOH$, 1863–71
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Transition metal binding sites and ligand parameters, 2032–8
Malonato(ethylenediamine) complexes of chromium(III): the structure of di-μ-hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
Formation of a chromium-bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
Kinetics and mechanism of diene exchange at six-coordinate chromium, 2237–40
CHROMYL
On the vibrational assignment and bond angles in chromyl fluoride 535–8
CINCHONA
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4-trifluoro-1-(2-thienyl)butane-1,3-dionate through adduct formation with cinchona alkaloids, 2369–73
CINEOLE
Structures of di-μ-hydroxobis[aquatrichlorotin(IV)]-1,4-dioxane(1/3), di-μ-hydroxobis[aquatrichlorotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatribromotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatrichlorotin(IV)]-water(1/4), and cis-diaquatetrachlorotin(IV)-water(1/3) 949–53
CLEAVAGE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1-3;6-7-η-8-endo-trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
The trans influence and trans effect of the arsine group. The x-ray structures of dichloro[diphenyl(o-vinylphenyl)arsine]platinum(II-) and [1-(o-diphenylarsinophenyl)-2-methoxyethyl-As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon-chelated carbonylruthenium complex with cyclic polyolefins, 545–51
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans-bis[1,2-bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
CLOSURE
Optimized synthesis and mechanism of formation of 2,4-dichloro-1,3-bis(dichlorophosphoryl)-2,4-dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Metallaborane chemistry. Part 11. Lower rotational barriers in seven-vertex than in twelve-vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo-1,1-$(Et_3P)_2$-2,3-Me_2-1,2,3-$PtC_2B_4H_4$] and [closo-1,1-$(Et_3P)_2$-1,2,4-$PtC_2B_4H_6$], 1186–99

CLUSTER

Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51

Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2]$.0.5MeOH, 52–4

Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104

New carbide clusters in the cobalt sub–group. Part 6. Crystallographic characterization of the tetramethylammonium salt of the paramagnetic anion carbidohexa–μ–carbonyloctacarbonyl–polyhedro–hexacobaltate(1–), 163–6

Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9

Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44

Improved syntheses of the hexanuclear clusters $[Ru_6(CO)_{18}]^{2-}$, $[HRu_6(CO)_{18}]^-$, and $H_2Ru_6(CO)_{18}$. The x–ray analysis of $[HRu_6(CO)_{18}]^-$, a polynuclear carbonyl containing an interstitial hydrogen ligand, 383–9

The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20

Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9

Preparation and carbon–13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17

Bonding properties of trinuclear metal carbonyls, 1005–11

Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35

Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50

Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42

Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of $[Pt_2W(\mu\text{–}C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24

Silver(I) imidazole perchlorate. An $(Ag^+)_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7

The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67

Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19

Crystal structure of tri–μ–carbonyloctacarbonyliodo–tetrahedro–tetracobaltate(1–) as its tetraethylammonium salt, 1820–2

Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7

Indirect location of hydride ligands in metal cluster complexes, 2509–16

COBALAMIN

The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66

The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81

COBALT

Intramolecular charge–transfer decomposition of the μ–peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18

Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6

New carbide clusters in the cobalt sub–group. Part 6. Crystallographic characterization of the tetramethylammonium salt of the paramagnetic anion carbidohexa–μ–carbonyloctacarbonyl–polyhedro–hexacobaltate(1–), 163–6

Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen)cobalt complexes, 167–73

Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3\text{–}B_3H_7)(CO)H(PPh_3)_2]$, 196–200

Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8

Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33

Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6

Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9

Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80

Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8

Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15

Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type $[Co(SiR_3)(CO)_nL_{4-n}]$, 923–7

Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8

Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83

Bonding properties of trinuclear metal carbonyls, 1005–11

A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400

Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7

A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18

Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)–cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93

Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63

Structure of phthalocyaninatocobalt(II) at 4.3 K: a neutron diffraction study, 1688–92

Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30

Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6

Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19

Crystal structure of tri–μ–carbonyloctacarbonyliodo–tetrahedro–tetracobaltate(1–) as its tetraethylammonium salt, 1820–2

Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^3S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot0.5[NH_2NMeC(=S)SMe]$, 1893–7

COBALT(contd)
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Crystal structure of bis(isocyanato)(2,2:6',2''–terpyridyl)cobalt(II): stereochemistry of [M(tridentate ligand)(unidentate ligand)$_2$] complexes, 1932–8
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
Cobalt(II)–ether bonds. Comments, 2318
Cobalt(II)–ether bonds. Reply to comments, 2318
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Kinetics of solvolysis of the trans–dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
Metal–phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)– and diaquabis(p–chlorophenoxyacetato)manganese(II), –cobalt(II), and –magnesium(II), 2462–6
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
COBALTATE
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Potassium hexanitratocobaltate(III), 314–16
A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19
Crystal structure of tri–μ–carbonyloctacarbonyliodo–tetrahedro–tetracobaltate(1–) as its tetraethylammonium salt, 1820–2
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ion, 2339–47
COENZYME
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
COMPD
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
A study of copper compounds by x–ray absorption spectroscopy, 837–9
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–dioxane(1/3), di–μ–hydroxobis[aquatrichlorotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatribromotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatrichlorotin(IV)]–water(1/4), and cis–diaquatetrachlorotin(IV)–water(1/3) 949–53
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
COMPLEXON
Hydration of complexon complexes of lanthanide cations, 2151–4
COMPLX
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
COND
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
Bivalent metal complexes of 1,11–diamino–3,6,9–trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
CONDENSATION
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Study of ligand isomeric complexes of N–furfurylsalicylaldimine, 2319–22
CONFIGURATION
An electron paramagnetic resonance study of tetracyclopentadienyltantalum(IV), $[Ta(\sigma\text{–}C_5H_5)_2(\eta\text{–}C_5H_5)_2]$, 426–8
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Chlorine–35 nuclear quadrupole resonance studies on some tin(IV) chloride adducts, 1164–8
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Manganese 3d and 4s electron–density distribution in phthalocyaninatomanganese(II), 1515–25
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ion, 2339–47
Spin density and bonding in the CrF_6^{3-}ion in $K_2Na[CrF_6]$, 2348–53
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
CONFORMATION
Multinuclear magnetic resonance studies. Part 4. Tetraalkyldiphosphines with bulky substituents, 638–44
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16

CONFORMATION(contd)
Determination of the separate barrier energies for six-membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon-13 nuclear magnetic resonance study, 1582–92
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
CONFORMATIONAL
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio- and diseleno-ethers, 1175–81
CONST
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen)cobalt complexes, 167–73
The electronic spectra of the mixed mercury dihalides. Part 2. Identification, equilibrium and formation constants, and assignment of transitions, 209–15
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
One-electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom-transfer redox process, 1017–21
Vibrational spectroscopic study of trimethylarsine-boron trihalide adducts, 2016–19
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2-diaminoethane substituted complexes, 2228–36
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis-α-hydroxybenzylidenehydrazone(2-)-N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
CONTRACTION
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
COORDINATION
Kinetics and mechanisms of the reactions of vanadyl ion with β-diketones, 7–13
Thermochemistry of dichlorobis(NN-dimethylacetamide)zinc(II), and dichloro(NN-dimethylacetamide)cadmium(II) and -mercury(II), 156–8
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon-13 nuclear magnetic resonance spin-lattice relaxation study, 363–8
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6-naphthalene)chromium(0) and its arene replacement reactions, 991–5
Thermochemistry of metal complexes with the rigid ligand 1,3,5-cis,cis-triaminocyclohexane, 1055–9
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5-nitrosalicylate ion system, 1124–8
Kinetics and mechanism of the reactions of uranyl ion and β-diketones in methanol–water (9:1 v/v), 1502–10
Interaction of cis-diammine diaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13-tetraazacyclohexadecane, 1722–5
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis-α-hydroxybenzylidenehydrazone(2-)-N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
COPPER
Mixed-metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di-μ_3-acetonitrilecupriocarbidoennea-μ-carbonylhexacarbonyl-polyhedro-hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
Stereoselectivity in the ternary complexes copper(II)–N-benzyl-L-proline-D- or L-α-amino acids, 76–9
Macro-inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
Properties and structural characterization of copper(II) mixed complexes with 2,2'-bipyridyl and iminodiacetate or pyridine-2,6-dicarboxylate, 369–75
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Multiple forms of the copper(II)–carnosine complex, 590–6
Electronic properties and crystal structures of the copper-doped zinc(II) bis(pyridine-3-sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9
A study of copper compounds by x-ray absorption spectroscopy, 837–9
Exchange interaction in tetrameric oxygen-bridged copper(II) clusters of the cubane type, 875–9
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen-containing ligands, 984–90
Sulfur-ligand-metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
Thermochemistry of metal complexes with the rigid ligand 1,3,5-cis,cis-triaminocyclohexane, 1055–9
Crystal structure of bis(2-aminoethyl)amine(di-2-pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)-doped system, 1105–11
Comparative study of the electrochemical and pulse-radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11-tetraazacyclotetradecane, 1243–7
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Binary and ternary complexes of copper(II) involving imidazole, histamine, and L-histidine as ligands, 1312–16
Crystal structure and electronic properties of ammine[tris(2-aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
Thermodynamic studies on the complexation reaction of copper(II) macrocyclic tetraamine complexes with hydroxide ion, 1349–51
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the $[(Cu(OPh)_2(en))_2].2PhOH$ dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper-sulfur bond energy, 1638–40
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal-coordinated glycine, 1655–63
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2-diethylaminoethanolato)copper(II)]-tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13-tetraazacyclohexadecane, 1722–5

COPPER(contd)
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
The synthesis, properties, and the crystal and molecular structures of five–coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
Mixed–ligand complex formation by copper(II) with imidazole derivatives and dipeptides in aqueous solution, 2138–42
Kinetics of base hydrolysis of α–amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
Kinetics and mechanism of the hydrolysis of α–amino acid esters in mixed ligand complexes with copper(II) ethylenediaminemonoacetate, 2452–5
Bivalent metal complexes of 1,11–diamino–3,6,9–trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
CORRELATION
Transition metal binding sites and ligand parameters, 2032–8
CORRINOID
Interaction of cis–diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
COUPLING
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Thallium–205 nuclear magnetic resonance spectra of thallium(I) alkoxides, 1439–42
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
CROWN
Crystal structures of complexes between alkali metal salts and cyclic polyethers. Part 11. Complexes formed between 2,3,5,6,8,9,11,12–octahydro–1,4,7,10,13–benzopentaoxacyclopentadecin (benzo–15–crown–5) and sodium perchlorate (1:1), sodium perchlorate (2:1), and sodium tetraphenylborate (2:1), 1066–75
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16–hexaoxacyclooctadecane, 2191–8
CRYSTAL
Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of $[Pd_2Cl_4((Me_3C)_2P-CH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$, 59–63
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
New carbide clusters in the cobalt sub–group. Part 6. Crystallographic characterization of the tetramethylammonium salt of the paramagnetic anion carbidohexa–μ–carbonyloctacarbonyl–polyhedro–hexacobaltate(1–), 163–6
Reactions of $[Fe_2(\eta\text{–dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]I$, 186–91
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)-molybdenum(II)], 229–34
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI–)], 289–91
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Potassium hexanitratocobaltate(III), 314–16
Insertion of platinum into an ortho–carboranyl boron–hydrogen bond. The crystal and molecular structure of the diphenyl(ortho–carboranyl)phosphine complex $[PtCl(Ph_2PC_2B_{10}H_{10})(Ph_2PC_2B_{10}H_{11})]$, 317–20
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
The trans influence and trans effect of the arsine group. The x–ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
Crystal and molecular structure of bis(tetrasulfur tetraimide)silver(–I) perchlorate sesquihydrate, 355–9
Properties and structural characterization of copper(II) mixed complexes with 2,2'–bipyridyl and iminodiacetate or pyridine–2,6–dicarboxylate, 369–75

CRYSTAL(contd)
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Improved syntheses of the hexanuclear clusters $[Ru_6(CO)_{18}]^{2-}$, $[HRu_6(CO)_{18}]^-$, and $H_2Ru_6(CO)_{18}$. The x–ray analysis of $[HRu_6(CO)_{18}^-$, a polynuclear carbonyl containing an interstitial hydrogen ligand, 383–9
Vibrational spectra and crystal and molecular structure of trans,cis–S–methyl dithiocarbazate, a second conformer, 423–5
Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of $[MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2–)]$ (M = Mo or W; n = 1–3), 440–6
Crystal structures of fac–[bis(2–diphenylphosphinoethyl)phenylphosphine–PP'P'']tricarbonylchromium(0) and –molybdenum(0), 447–53
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine–coordinate [M(bidentate ligand)$_3$(unidentate ligand)$_3$]$^{x\pm}$ system, 454–8
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 1. 2,6–Diacetylpyridine bis(2'–pyridylhydrazone) 459–66
Synthesis and crystal structure of hydrido(tetrahydroborato)tetrakis(trimethylphosphine)molybdenum(II), 467–70
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Crystal structure of bis(iodosyl trifluoride–iodyl trifluoride), 481–3
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, $[Ru_2(C_8H_8SiMe_2CH_2CH_2SiMe_2)(CO)_5]$ and $[Ru_2(C_8H_8SiMe_3)(SiMe_3)(CO)_4]$, 559–64
Synthesis and crystal structure of tetramethylammonium μ–pentachlorothiophenolatobis[pentacarbonyltungstate(0)], 570–3
Molecular structure of germylcyclopentadiene in the crystalline phase at 160 K and in the gas phase, 603–6
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal structure of γ–monoclinic selenium, 624–7
Crystal and molecular structures of dimorpholinotri– and –diselane 628–31
Crystal and molecular structure of dimorpholinotetrasulfane, 632–3
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
The N–M–N bond angle in the chelate ring of ethylenediamine. The crystal structure of tetraaqua(ethylenediamine)nickel(II) nitrate, 654–8
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu–SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
Electronic properties and crystal structures of the copper–doped zinc(II) bis(pyridine–3–sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
A combined neutron and x–ray diffraction study of hydrogenbis(N–N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'–bi(nido–decaboranyl) and 2,6'–bi(nido–decaboranyl), 790–6
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5–C_5Me_4Et)(\eta^5–C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
Preparation and properties of 1–adamantoxides, 2–adamantoxides, and 1–adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1–adamantoxo)dimethylaminemolybdenum(IV), 901–10
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–dioxane(1/3), di–μ–hydroxobis[aquatrichlorotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatribromotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatrichlorotin(IV)]–water(1/4), and cis–diaquatetrachlorotin(IV)–water(1/3) 949–53
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
Nature of the novel $C_{15}H_{15}$ ligand in $[W(CO)_2(\eta^5–C_5H_5)(\eta^3–C_{15}H_{15})]$, 1032–5
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
Pentamethylcyclopentadienylrhodium and –iridium complexes. Part 26. Dicationic η^5–aniline and η^6–anisole complexes, 1048–54
Crystal structures of complexes between alkali metal salts and cyclic polyethers. Part 11. Complexes formed between 2,3,5,6,8,9,11,12–octahydro–1,4,7,10,13–benzopentaoxacyclopentadecin (benzo–15–crown–5) and sodium perchlorate (1:1), sodium perchlorate (2:1), and sodium tetraphenylborate (2:1), 1066–75
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
Aryltriazenido complexes. Crystal and molecular structure of trans–carbonyl(1,3–di–p–tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
Crystal structure of bis(2–aminoethyl)amine(di–2–pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)–doped system, 1105–11
Diazoalkane complexes of tungsten. Crystal structures of $[WBr(N–N:CHCH_2CH_2CH_2OH)(dppe)_2][PF_6].0.5EtOH$(1) and $[WBr(N–N:CMe_2)(dppe)_2]Br.0.5MeOH$(2), 1150–5
Crystal structure of tetra(glycolato)uranium(IV) dihydrate, a photoreduction product of uranyl ions in the presence of glycolic acid, 1182–5
Metallaborane chemistry. Part 11. Lower rotational barriers in seven–vertex than in twelve–vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo–1,1–$(Et_3P)_2$–2,3–Me_2–1,2,3–$PtC_2B_4H_4$] and [closo–1,1–$(Et_3P)_2$–1,2,4–$PtC_2B_4H_6$], 1186–99
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Crystal and molecular structure of 6,6'–bis(nido–decaboranyl) oxide, $(B_{10}H_{13})_2O$, 1251–2
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyl-

CRYSTAL(contd)
dithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Crystal structure and electronic properties of ammine[tris(2–aminoethyl)amine]copper(II) diperchlorate and potassium pentaammineocopper(II) tris(hexafluorophosphate), 1342–8
Crystal and molecular structure of SnMePh[$C_{10}H_5$(OMe–5)(CH_2NMe_2–8)]Br and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides SnRR'[$C_{10}H_5$(OMe–5)(CH_2NMe_2–8)]X and SnRR'[$CH_2C_6H_4(CH_2NMe_2$–2)]X, 1352–8
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the [$(Cu(OPh)_2(en))_2$].2PhOH dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], [$Hg_2Me_2(S_2C_6H_{10})$], 1471–4
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Crystal structure of a natural and a partially silver–exchanged heulandite, 1511–14
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Crystal structures of three palladium complexes with ortho–phenylenebis(methylphenylarsine) ligands, 1556–66
Crystal structures of meso–ortho–phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of [$(OC)_5W(\mu$–C(OMe)Ph)$Pt(PMe_3)_2$] (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of [$(OC)_4Mn(\mu$–(1–σ,1–2–η–C:CH–CH_2–CH_2–O))Pt$(PMe_3)_2$] (Mn–Pt), 1601–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ–tolylidyne groups; crystal structure of [$PtW(\mu$–C·C_6H_4Me–p)$(CO)_2(PMe_2Ph)_2(\eta$–$C_5H_5)$], 1609–14
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of [$Pt_2W(\mu$–C(OMe)Ph)$(CO)_6$[$P(CMe_3)_2Me]_2$], 1615–24
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of [$MnPt(\mu$–I)$(COCH_2CH_2CH_2)(CO)_4$[$P(CMe_3)_2Me$]], 1625–9
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
Silver(I) imidazole perchlorate. An $(Ag^+)_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7
Structure of phthalocyaninatocobalt(II) at 4.3 K: a neutron diffraction study, 1688–92
Synthesis and structure of methylmercury(II) complexes of 9–methylguanine, including the x–ray structural analysis of (9–methylguanine)methylmercury(II) nitrate, 1693–7
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2–diethylaminoethanolato)copper(II)]–tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of [$(Fe(CO)_3[\eta^5$–$C_5Ph_4OAg(OH_2)])_2$][$PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
Fluoride crystal structures. Part 34. Antimony pentafluoride–iodine trifluoride dioxide, 1734–6
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) $[BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) $[BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
Low valent metal isocyanide complexes. 2. Oxidative reactions of pentakis(tert–butyl isocyanide)iron with alkyl, allyl, benzyl, fluoroalkyl, pentafluorophenyl halides, and $[Me_3O][BF_4]$ + PhC:CPh. Isocyanide insertion reactions. Structure of $Fe(CNCMe_3)_3(1$–4–η–C(:$NCMe_3$):C(Ph)C(Ph):C(:$NCMe_3$)), 1779–88
Synthesis and crystal and molecular structure of bis(trimethylsilylmethylidyne)tetrakis(trimethylsilylmethyl)dirhenium (Re–Re), 1797–9
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
Crystal structure of tri–μ–carbonyloctacarbonyliodo–tetrahedro–tetracobaltate(1–) as its tetraethylammonium salt, 1820–2
Crystal and molecular structures of silyl isocyanate (at –135°C) and of germyl isocyanate (at –95°C), 1838–44
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
Synthesis and properties of bis(tert–butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of LiCr[$OCH(CMe_3)_2]_4$.THF, Cr[$OCH(CMe_3)_2]_4$, and LiFe[$OCH(CMe_3)_2]_4$.$(Me_3C)_2$CHOH, 1863–71
Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^3S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), [$Co(NH_2NMeC(=S)SMe)_2Cl_2$]·0.5[$NH_2NMeC(=S)SMe$], 1893–7
Stereochemistry of [M(bidentate ligand)$_2$(unidentate ligand)]. Crystal structure of iodobis(pyrrolidinyldithiocarbamato)iron(II–I)–iodine (2/1), 1921–7
Crystal structure of tris(NN–diethyldithiocarbamato)iron(IV) pentaiodide, 1928–31
Crystal structure of bis(isocyanato)(2,2:6',2''–terpyridyl)cobalt(II): stereochemistry of [M(tridentate ligand)(unidentate ligand)$_2$] complexes, 1932–8
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of [NBu_4][$(Zn(S_2CNMe_2)_2)_2(\mu$–OCOMe)], 1939–44
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of [NEt_4][$Zn(S_2CNMe_2)_3$], R[$Zn(C_7H_4NS_2)_3(OH_2)$], R[$Zn(S_2CNMe_2)_2(C_7H_4NS_2)$].EtOH, and R[$Zn(S_2CNMe_2)(C_7H_4NS_2)_2$] (R = NBu_4), 1945–57
Bis adducts of phthalocyaninatoiron(II) with Group 6A axial donor atoms. Crystal and molecular structure of sulfur–bonded bis(dimethyl sulfoxide)phthalocyaninatoiron(II)–dimethyl sulfoxide (1/2), 1965–9
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of [$PdCl_2$(mqp)], 1974–82
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of [$Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2$] and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)$],

CRYSTAL(contd)
1992–2000
Crystal and molecular structure of molybdenum tetrachloride oxide by neutron and x-ray diffraction, 2006–9
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
The synthesis, properties, and the crystal and molecular structures of five-coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
Malonato(ethylenediamine) complexes of chromium(III): the structure of di-μ-hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
The crystal structure of potassium trioxalatogermanate(IV) monohydrate, 2051–2
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido- and aroylhydroxylamido-complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2\text{-}p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
Some transition metal complexes derived from 1,9-bis(tritylthio)-3,7-diazanonane and the crystal structure of bis[(3,7-diazanonane-1,9-dithiolato-N,N',S,S')-nickel)-S,S']palladium(II), 2075–80
Synthesis and physicochemical characteristics of alkane (or arene)-thio-, -sulfinato-, and -sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20-tetraphenylporphyrinato)indium(III), 2081–9
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2-aminoethyl)amine, bis(3-aminopropyl)amine, and 2-aminoethyl(3-aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
Synthesis of platinum complexes of 2-methyl-2,4,6-tris(trifluoromethyl)pyran. X-ray crystal structure of (cycloocta-1,5-diene)[2-methyl-2,4,6-tris(trifluoromethyl)pyran]platinum, 2095–101
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
Reactions of 1-3-η-allylmanganese and -rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1-3-η-allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Alkyne complexes of platinum. Part 4. Stepwise formation of di- and triplatinum complexes with bridging alkyne ligands; crystal structure of cd-bis(μ-diphenylacetylene)-abef-tetrakis(triethylphosphine)triplatinum, 2182–90
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16-hexaoxacyclooctadecane, 2191–8
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine-N,O-disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N-alkyl-N-nitrosoanilines, 2282–7
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
Crystal structure of vanadyl phthalocyanine, phase II, 2300–2
Crystal and molecular structure of bis(N,N'-dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
Bonding and structure of diphenyltellurium(IV) difluoride, 2306–8
Preparation of the sixteen-atom ring chelates trans-$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans-$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$-1,3 and the crystal structure of [2,6-bis(tert-butylthiomethyl)phenyl-C^1,S,S']chloropalladium(II), 2312–14
Synthesis and crystal structure of bis[σ-tricarbonyl(η^5-cyclopentadienyl)manganese]bis(η^5-cyclopentadienyl)titanium, 2315–17
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
Metal–phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)- and diaquabis(p-chlorophenoxyacetato)manganese(II), -cobalt(II), and -magnesium(II), 2462–6
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo- and dialkylamidorhenium compounds. Structures of di-μ-methoxotetramethoxo-μ-oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)-LiCl-THF(1/1/2)], and trans-tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
Multinuclear magnetic resonance studies on μ-hydrido-μ-hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di-μ-hydridodihydridohexakis(trimethylphosphine-)diruthenium(II) and tri-μ-hydridohexakis(trimethylphosphine)-diruthenium(II) tetrafluoroborate, 2480–7
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl-aluminum and -gallium and the crystal and molecular structure of ([N-methyl-N-(nitroso-O')hydroxylamido-O]dimethylaluminum-O')trimethylaluminum, 2493–7
Electronic and resonance-Raman spectra of the linear-chain mixed valence platinum complexes $([Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane-1,2-diamine and pn = propane 1,2-diamine), 2498–502
Bivalent metal complexes of 1,11-diamino-3,6,9-trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
Phosphaferrocenes as phosphorus ligands. Crystal and molecular structure of tetracarbonyl(3,4-dimethylphosphaferrocene-P)iron 2522–5
CRYSTN
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]$-$Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
CUPRATE
Kinetics of ligand exchange between ethylenedinitrilotetraacetatocuprate(II) and triethylenetetraaminecadmium(II), 958–61
CUPRIC
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
CUPRIORHODIUM
Mixed-metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di-μ_3-acetonitrilecupriocarbidoennea-μ-carbonylhexacarbonyl-polyhedro-hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
CURIE
Formation of lead-bearing ferrite in aqueous suspension by air oxidation, 825–8
CYANIDE
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
CYANO
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
The cyanobis(1,10-phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
Zirconium complexes with the trifunctional 3-cyanopentane-2,4-dionate ligand, 1265–8
Structure and reactivities of six-coordinate first row transition metal nitrosyl complexes, 1359–67
CYANOCOBALTATE
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
CYANOETHYL
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''-tetra(2-cyanoethyl)-1,4,8,11-tetraazacyclotetradecane with nickel(II), 2117–20
CYANOETHYLATION
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''-tetra(2-cyanoethyl)-1,4,8,11-tetraazacyclotetradecane with nickel(II), 2117–20
CYANOETHYLTETRAAZACYCLOTETRADECANE
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''-tetra(2-cyanoethyl)-

CYANOETHYLTETRAAZACYCLOTETRADECANE(contd)
1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
CYANOFERRATE
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
CYANOHYDROBORATE
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
CYANOPENTANEDIONATE
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
CYANOPLATINATE
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]\text{-}Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
CYANOPLATINUM
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
CYANOTRIHYDRO
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)\text{–}BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
CYANOTRIHYDROBORATE
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)\text{–}BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
CYCLAM
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
CYCLIC
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
CYCLIZATION
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
CYCLOADDN
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
CYCLOALKADIENE
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOALKENE
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
CYCLOALKYLCOBALAMIN
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
CYCLOBUTADIENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
CYCLOCONDENSATION
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
The synthesis, properties, and the crystal and molecular structures of five–coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
CYCLODIMERIZATION
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
CYCLODIPHOSPHAZANE
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
CYCLOHEPTADIENE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
CYCLOHEPTADIENYL
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOHEXADIENE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOHEXADIENYL
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5\text{–}C_5Me_4Et)(\eta^5\text{–}C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
CYCLOHEXADIENYLIRON
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
CYCLOHEXADIENYLIUMIRON
endo Addition to dienylium metal complexes, 1135–41
CYCLOHEXANEDITHIOLATE
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], $[Hg_2Me_2(S_2C_6H_{10})]$, 1471–4
CYCLOHEXATRIENE
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
CYCLOHEXYL
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–

CYCLOHEXYL(contd)
ray structural determinations of hexamethylbis(diethylphenylphosphine)tri-μ-methyl-triangulo-trirhenium(III) and tri-μ-chloro(N-nitroso-N-trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)-triangulo-trirhenium(III), 334–44
Studies in six-coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
CYCLOHEXYLDITHIO
Studies in six-coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
CYCLOHEXYLDITHIOPHOSPHINITE
Studies in six-coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
CYCLOOCTADIENE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon-chelated carbonylruthenium complex with cyclic polyolefins, 545–51
The oxidative addition of allylic halides to bis(cycloocta-1,5-diene)platinum; dynamic behavior of σ- and 1-3-η-allyl(cycloocta-1,5-diene)platinum complexes, 1200–7
Ligand substitution reactions of neutral and cationic allyl(cycloocta-1,5-diene)platinum complexes, 1208–19
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOOCTADIENYL
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOOCTASELENIUM
Crystal structure of γ-monoclinic selenium, 624–7
CYCLOOCTATETRAENE
Tris(2-pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex-1-ene by rhodium complexes, 55–8
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, $[Ru_2(C_8H_8SiMe_2CH_2CH_2SiMe_2)(CO)_5]$ and $[Ru_2(C_8H_8SiMe_3)(SiMe_3)(CO)_4]$, 559–64
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5-indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5-indenyl(1-2:3-4-η^4-[6-endo-propen-2-yl-1,2,3,4-tetrakis(trifluoromethyl)cyclohexa-1,3-diene])rhodium formed in a cyclo-cotrimerisation reaction, 962–72
Proton ENDOR and TRIPLE resonance spectra of a frozen solution of (1-8-η-cyclooctatetraene)(1-5-η-cyclopentadienyl)titanium, 2425–7
CYCLOOCTATRIENE
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
CYCLOOCTATRIENYL
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1-3;6-7-η-8-endo-trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
CYCLOPALLADATION
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$-1,3 and the crystal structure of [2,6-bis(tert-butylthiomethyl)phenyl-C^1,S,S']chloropalladium(II), 2312–14
CYCLOPENTADIENE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon-13 nuclear magnetic resonance spectroscopy, 159–62
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon-chelated carbonylruthenium complex with cyclic polyolefins, 545–51
CYCLOPENTADIENONE
Reduction-oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x-ray crystal structure of $[(Fe(CO)_3[\eta^5\text{-}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one-electron oxidant, 1710–15
CYCLOPENTADIENYL
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen-)cobalt complexes, 167–73
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η-cyclohexatriene)(η-cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
Stereochemically nonrigid silanes, germanes, and stannanes. Part 6. Poly(cyclopentadienyl)silanes. A comparison of thermodynamic parameters derived from approximate methods with those obtained using full lineshape analysis of carbon-13 nuclear magnetic resonance data, 224–8
Reactions of co-ordinated ligands. Part 21. Reaction of 3,3,3-trifluoroprop-1-yne with methyl- and benzyldicarbonyl(η-cyclopentadienyl)iron and of hexafluorobut-2-yne with tricarbonyl(1-3-η-2-methylallyl)cobalt. Crystal structure of [1-5-η-exo-1-acetyl-2,4,6-tris(trifluoromethyl)cyclohexadienyl](η-cyclopentadienyl)iron, 292–8
An electron paramagnetic resonance study of tetracyclopentadienyltantalum(IV), $[Ta(\sigma\text{-}C_5H_5)_2(\eta\text{-}C_5H_5)_2]$, 426–8
Nickel complexes of the methyl esters of dithiocarbazic and N-substituted dithiocarbazic acids, 499–502
Reactions of the η^6-benzene(η^5-ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5\text{-}C_5Me_4Et)(\eta^5\text{-}C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
Nature of the novel $C_{15}H_{15}$ ligand in $[W(CO)_2(\eta^5\text{-}C_5H_5)(\eta^3\text{-}C_{15}H_{15})]$, 1032–5
Pentamethylcyclopentadienylrhodium and -iridium complexes. Part 26. Dicationic η^5-aniline and η^6-anisole complexes, 1048–54
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl-like ligands. Part 3. Dicarbonylnitrosyl(η-pentamethylcyclopentadienyl) complexes, 1253–8
Bis(η-cyclopentadienyl)molybdenum (and -tungsten or -titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Carbon-oxygen and carbon-hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5\text{-}C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Mono- and bis-η-cyclopentadienyl derivatives of niobium and tantalum: improved synthetic routes via trialkyl(cyclopentadienyl)tin reagents, 2155–61
Synthesis and crystal structure of bis[σ-tricarbonyl(η^5-cyclopentadienyl)manganese]bis(η^5-cyclopentadienyl)titanium, 2315–17
Proton ENDOR and TRIPLE resonance spectra of a frozen solution of (1-8-η-cyclooctatetraene)(1-5-η-cyclopentadienyl)titanium, 2425–7
Mass spectrometry of compounds of the type $[Fe(CO)_2(\eta\text{-}C_5H_5)R]$ (R = alkyl), 2488–92
CYCLOPENTADIENYLGERMANE
Molecular structure of germylcyclopentadiene in the crystalline phase at 160 K and in the gas phase, 603–6
CYCLOPENTADIENYLSILANE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 6. Poly(cyclopentadienyl)silanes. A comparison of thermodynamic parameters derived from approximate methods with those obtained using full lineshape analysis of carbon-13 nuclear magnetic resonance data, 224–8
CYCLOPENTADIENYLTANTALUM
An electron paramagnetic resonance study of tetracyclopentadienyltantalum(IV), $[Ta(\sigma\text{-}C_5H_5)_2(\eta\text{-}C_5H_5)_2]$, 426–8
CYCLOPENTANE
Synthesis and chemistry of some palladacyclopentanes, 1633–7
CYCLOPENTENYL
Nature of the novel $C_{15}H_{15}$ ligand in $[W(CO)_2(\eta^5\text{-}C_5H_5)(\eta^3\text{-}C_{15}H_{15})]$, 1032–5
CYCLOPROPANEDICARBOXYLATE
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane-water, 41–5

CYCLOTETRAAZATHIANE
Crystal and molecular structure of bis(tetrasulfur tetraimide)silver(-I) perchlorate sesquihydrate, 355–9
CYCLOTETRATHIATRIAZENIUM
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
CYCLOTRIPHOSPHAZATRIENE
Studies of phosphazenes. Part 10. Spirocyclic derivatives of cyclotriphosphazatrienes, 840–4
CYCLOTRITHIADIAZENIUM
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
CYSTEINE
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
DEALKYLATION
Some transition metal complexes derived from 1,9–bis(tritylthio)–3,7–diazanonane and the crystal structure of bis[(3,7–diazanonane–1,9–dithiolato–N,N',S,S'–nickel)–S,S']palladium(II), 2075–80
DEAQUATION
Influence of solvation on the initial and transition states for anation reactions of transition metal complexes in mixed aqueous solvents 1494–501
DECABORANYL
Crystal and molecular structure of 6,6'–bis(nido–decaboranyl) oxide, $(B_{10}H_{13})_2O$, 1251–2
DECARBONYLATION
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
DECOMPN
Intramolecular charge–transfer decomposition of the μ–peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Solid state vibrational spectroscopy. Part 7. A vibrational spectroscopic study of the thermal decompositions of sodium and potassium thiosulfate, 245–7
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2–diethylaminoethanolato)copper(II)]–tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^3S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot0.5[NH_2NMeC(=S)SMe]$, 1893–7
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
DEHYDRATION
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
Thermal reactions of the mixed–valence iron fluorides, $Fe_2F_5.nH_2O$ 845–50
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
DENTICITY
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
DEPERHYDRATION
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
DEPROTONATION
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
DESORPTION
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
DEUTERIDE
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
DIALKYLACETYLENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
DIARSINE
Crystal structures of three palladium complexes with ortho–phenylenebis(methylphenylarsine) ligands, 1556–66
DIAZADIENE
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of $[RuCl_2(PPh_3)_3]$ and $[RuH(Cl)(PPh_3)_3]$ and disproportionation of a hydridochloro complex, 539–44
DIAZANONANEDITHIOLATONICKEL
Some transition metal complexes derived from 1,9–bis(tritylthio)–3,7–diazanonane and the crystal structure of bis[(3,7–diazanonane–1,9–dithiolato–N,N',S,S'–nickel)–S,S']palladium(II), 2075–80
DIAZAOCTANEDIAMINE
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
DIAZENIDO
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
DIAZOALKANE
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
Diazoalkane complexes of tungsten. Crystal structures of $[WBr(N{-}N{:}CHCH_2CH_2CH_2OH)(dppe)_2][PF_6].0.5EtOH$(1) and $[WBr(N{-}N{:}CMe_2)(dppe)_2]Br.0.5MeOH$(2), 1150–5
DIAZOALKANOL
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
DIAZOBUTANOL
Diazoalkane complexes of tungsten. Crystal structures of $[WBr(N{-}N{:}CHCH_2CH_2CH_2OH)(dppe)_2][PF_6].0.5EtOH$(1) and $[WBr(N{-}N{:}CMe_2)(dppe)_2]Br.0.5MeOH$(2), 1150–5
DIAZOMETHYLETHANE
Diazoalkane complexes of tungsten. Crystal structures of $[WBr(N{-}N{:}CHCH_2CH_2CH_2OH)(dppe)_2][PF_6].0.5EtOH$(1) and $[WBr(N{-}N{:}CMe_2)(dppe)_2]Br.0.5MeOH$(2), 1150–5
DIBROMOALKANE
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
DIBUTYLMETHOXY
Synthesis and properties of bis(tert–butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and

DIBUTYLMETHOXY(contd)
copper(I). Crystal and molecular structures of LiCr[OCH(CMe$_3$)$_2$]$_4$.THF, Cr[OCH(CMe$_3$)$_2$]$_4$, and LiFe[OCH(CMe$_3$)$_2$]$_4$.(Me$_3$C)$_2$CHOH, 1863–71
DICARBAPLATINAHEPTABORANE
Metallaborane chemistry. Part 11. Lower rotational barriers in seven-vertex than in twelve-vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo-1,1-(Et$_3$P)$_2$-2,3-Me$_2$-1,2,3-PtC$_2$B$_4$H$_4$] and [closo-1,1-(Et$_3$P)$_2$-1,2,4-PtC$_2$B$_4$H$_6$], 1186–99
DICARBOXYLATE
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
DICATION
Mercury(II)- and nitrosyl-induced aquation of anionopentaaminecobalt(III) species. Reactions of the t-[Co(N(CH$_2$CH$_2$NH$_2$)$_3$)(NH$_3$)X]$^{2+}$ ions (X = Cl$^-$ or N$_3^-$) and the importance of ion pairs, 2255–8
DICOBALT
The contribution of iron(II) reduction alongside proton-induced decomposition in the reactions of two μ-hydroxo-μ-peroxodicobalt(III) complexes, 2533–5
DICYCLOHEXYLDITHIOPHOSPHINITE
Studies in six-coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
DIENE
Olefin–acetylene metal complexes: olefin–hexafluorobut-2-yne complexes of rhodium(I), 1716–21
Transition metal–diene complexes. Part 3. Isomerization of methyl-substituted acyclic and cyclic 1,3- and 1,4-dienes coordinated to rhodium(I), 2053–9
Kinetics and mechanism of diene exchange at six-coordinate chromium, 2237–40
DIETHYLDITHIOCARBAMATE
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Crystal structure of tris(NN-diethyldithiocarbamato)iron(IV) pentaiodide, 1928–31
DIETHYLDITHIOCARBAMATO
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
DIETHYLDITHIOCARBAMATOCOPPER
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
DIETHYLENETRIAMINE
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN$_6$ chromophore, 690–8
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
DIFLUORODIPHENYLTELLURIUM
Bonding and structure of diphenyltellurium(IV) difluoride, 2306–8
DIIMIDOSULFUR
One-electron reduction of diimidosulfur compounds, S(NR)$_2$, and some complexes of Group 6A metal carbonyl derivatives containing S(NR)$_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
DIKETONATE
Zirconium complexes with the trifunctional 3-cyanopentane-2,4-dionate ligand, 1265–8
Photochemistry of uranium(IV) 1,3-diketonates in organic solvents 1324–7
Olefin–acetylene metal complexes: olefin–hexafluorobut-2-yne complexes of rhodium(I), 1716–21
DIKETONE
Kinetics and mechanisms of the reactions of vanadyl ion with β-diketones, 7–13
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen-containing ligands, 984–90
Photochemistry of uranium(IV) 1,3-diketonates in organic solvents 1324–7
Kinetics and mechanism of the reactions of uranyl ion and β-diketones in methanol–water (9:1 v/v), 1502–10
DIMER
Molecular structure of dimeric iron trichloride in the vapor phase as determined by electron diffraction, 87–9
A combined neutron and x-ray diffraction study of hydrogenbis(N-N-dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the [(Cu(OPh)$_2$(en))$_2$].2PhOH dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Crystal structure of 4-phenyl-1,2-dithia-3,5-diazole dimer, 1812–15
DIMERIZATION
Concentration- and solvent-dependent electron spin resonance signals and dimer formation of high-spin iron(III) porphyrins, 526–34
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Kinetics of orthoperiodate dimerization studied by temperature-jump spectrophotometry, 2250–4
DIMETHYL
A combined neutron and x-ray diffraction study of hydrogenbis(N-N-dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
DIMETHYLSILANEDIYL
Synthesis of bis-μ-diorganosilanediyl-af-dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of [(PtH(μ-SiMe$_2$)[P(C$_6$H$_{11}$)$_3$])$_2$], 659–66
DINITROGEN
Ab-initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
DINUCLEAR
The contribution of iron(II) reduction alongside proton-induced decomposition in the reactions of two μ-hydroxo-μ-peroxodicobalt(III) complexes, 2533–5
DIOL
Molybdenum(VI) complexes from diols and aminoalcohols: the occurrence of molybdenum dioxide and dimolybdenum tri- and pentoxide core structures, 248–52
DIOXANE
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
Structures of di-μ-hydroxobis[aquatrichlorotin(IV)]-1,4-dioxane(1/3), di-μ-hydroxobis[aquatrichlorotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatribromotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatrichlorotin(IV)]-water(1/4), and cis-diaquatetrachlorotin(IV)-water(1/3) 949–53
DIOXIDE
Oxygen-transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Synthesis and physicochemical characteristics of alkane (or arene)-thio-, -sulfinato-, and -sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20-tetraphenylporphyrinato)indium(III), 2081–9
DIOXOBISTRIFLUOROOXOIODINE
Thermochemistry of fluorine compounds. Part 5. Di-μ-oxobis[trifluorooxoiodine(VII)], 869–70
DIPEPTIDE
Mixed-ligand complex formation by copper(II) with imidazole derivatives and dipeptides in aqueous solution, 2138–42
DIPHOSPHINE
Formation of large chelate rings and cyclometalated complexes from (Me$_3$C)$_2$PCH$_2$CH$_2$CHMeCH$_2$CH$_2$P(CMe$_3$)$_2$ and platinum and palladium chlorides. Crystal structure of [Pd$_2$Cl$_4$((Me$_3$C)$_2$P-CH$_2$CH$_2$CHMeCH$_2$CH$_2$P(CMe$_3$)$_2$)], 59–63
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Multinuclear magnetic resonance studies. Part 4. Tetraalkyldiphosphines with bulky substituents, 638–44
DIPICOLINATE
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
DIRUTHENIUM
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, [Ru$_2$(C$_8$H$_8$SiMe$_2$CH$_2$CH$_2$SiMe$_2$)(CO)$_5$] and [Ru$_2$(C$_8$H$_8$SiMe$_3$)(SiMe$_3$)(CO)$_4$], 559–64
DISELENIDE
Complexes of trimethylplatinum(IV) halides with dithio- and diseleno-ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74

DISELENIDE(contd)
Mass spectral investigations on benzeneseleninic acid, 1467–70
DISPLACEMENT
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
DISPROPORTIONATION
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of $[RuCl_2(PPh_3)_3]$ and $[RuH(Cl)(PPh_3)_3]$ and disproportionation of a hydridochloro complex, 539–44
DISSOCN
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
DISULFATE
Solution calorimetry of nitrosonium salts, 2415–17
DISULFIDE
Crystal structure of γ–monoclinic selenium, 624–7
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74
Crystal and molecular structure of bis(N,N'–dimethylformamidine)–disulfidehexachlorotellurate, 2303–5
DITHIADIAZOLE
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
DITHIADIAZOLIUM
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
DITHIATRIAZAPHOSPHORINE
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
DITHIOCARBAMATE
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
DITHIOCARBAZATE
Vibrational spectra and crystal and molecular structure of trans,cis–S–methyl dithiocarbazate, a second conformer, 423–5
Synthesis and fluxional character of complexes of the type $[M_2(cp)_2(CO)_3(CNR)]$ (M = Fe or Ru, cp = η–C_5H_5), 503–10
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2\text{–}N{:}C(\text{–}S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
DITHIOCARBAZATOCOBALT
Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^3S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot 0.5[NH_2NMeC(=S)SMe]$, 1893–7
DITHIOLANECARBOXYLATE
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
DITHIOLATE
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], $[Hg_2Me_2(S_2C_6H_{10})]$, 1471–4
DITHIOPHOSPHINITE
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
DMF
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
DMSO
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
Bis adducts of phthalocyaninatoiron(II) with Group 6A axial donor atoms. Crystal and molecular structure of sulfur–bonded bis(dimethyl sulfoxide)phthalocyaninatoiron(II)–dimethyl sulfoxide (1/2), 1965–9
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
DYNAMICS
The oxidative addition of allylic halides to bis(cycloocta–1,5–diene)platinum; dynamic behavior of σ– and 1–3–η–allyl(cycloocta–1,5–diene)platinum complexes, 1200–7
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
DYSPROSIUM
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
EDTA
Kinetics of ligand exchange between ethylenedinitrilotetraacetatocuprate(II) and triethylenetetraaminecadmium(II), 958–61
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
EHMO
Bonding properties of trinuclear metal carbonyls, 1005–11
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
ELEC
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
ELECTROCHEM
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6

ELECTROCHEM(contd)
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper-(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)–BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
ELECTRODE
Application of the iodide–ion–selective electrode to a kinetic study of the periodate–iodide reaction, 1269–71
ELECTRON
An electron paramagnetic resonance study of tetracyclopentadienyl-tantalum(IV), $[Ta(\sigma–C_5H_5)_2(\eta–C_5H_5)_2]$, 426–8
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N–alkylphenothiazines, 484–6
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin-2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Manganese 3d and 4s electron–density distribution in phthalocyaninatomanganese(II), 1515–25
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
Electron relaxation rates of lanthanide aqua cations, 2147–50
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ ion, 2339–47
Spin density and bonding in the CrF_6^{3-} ion in $K_2Na[CrF_6]$, 2348–53
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
ELECTRONEGATIVITY
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Iodine–127 Moessbauer spectra of diiodine undecafluorodiantimonate(1–) and some polyhalide anions, 1060–5
ELECTRONIC
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Malonato(ethylenediamine) complexes of chromium(III): the structure of di–μ–hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
Hexaisothiocyanates of vanadium(II), 2042–3
ELECTROREDN
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
ELIMINATION
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
EMISSION
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(-I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2–N:C(–S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
ENDOR
Proton ENDOR and TRIPLE resonance spectra of a frozen solution of (1–8–η–cyclooctatetraene)(1–5–η–cyclopentadienyl)titanium, 2425–7
ENERGY
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
The interaction of amines with iron pentacarbonyl, 1461–6
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
ENHANCEMENT
Hydration of complexon complexes of lanthanide cations, 2151–4
ENTHALPY
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
ENTROPY
Intramolecular charge–transfer decomposition of the μ–peroxobis[-pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Reactions of 1,1,1–tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Solutions of hydrogen bromide in sulfolane, 2028–31
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
EQUIL
Silicate species in solution. Part 1. Experimental observations, 393–8

EQUIL(contd)
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5–nitrosalicylate ion system, 1124–8
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Thermodynamic studies on the complexation reaction of copper(II) macrocyclic tetraamine complexes with hydroxide ion, 1349–51
The hydrolysis of metal ions. Part 3. Lead(II), 1577–81
Solutions of hydrogen bromide in sulfolane, 2028–31
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
ERBIUM
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
ESR
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
An electron paramagnetic resonance study of tetracyclopentadienyltantalum(IV), $[Ta(\sigma\text{–}C_5H_5)_2(\eta\text{–}C_5H_5)_2]$, 426–8
Concentration– and solvent–dependent electron spin resonance signals and dimer formation of high–spin iron(III) porphyrins, 526–34
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Multiple forms of the copper(II)–carnosine complex, 590–6
Electronic properties and crystal structures of the copper–doped zinc(II) bis(pyridine–3–sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Crystal structure and electronic properties of ammine[tris(2–aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the $[(Cu(OPh)_2(en))_2].2PhOH$ dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–R'SO_2X reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Silver(I) imidazole perchlorate. An $(Ag^+)_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
ESTER
Kinetics of base hydrolysis of α–amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics and mechanism of the hydrolysis of α–amino acid esters in mixed ligand complexes with copper(II) ethylenediaminenonoacetate, 2452–5
ETHANEDIAMINE
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes $([Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane–1,2–diamine and pn = propane 1,2–diamine), 2498–502
ETHANOL
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
ETHER
Crystal structures of complexes between alkali metal salts and cyclic polyethers. Part 11. Complexes formed between 2,3,5,6,8,9,11,12–octahydro–1,4,7,10,13–benzopentaoxacyclopentadecin (benzo–15–crown–5) and sodium perchlorate (1:1), sodium perchlorate (2:1), and sodium tetraphenylborate (2:1), 1066–75
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16–hexaoxacyclooctadecane, 2191–8
Cobalt(II)–ether bonds. Reply to comments, 2318
Cobalt(II)–ether bonds. Comments, 2318
ETHYL
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
ETHYLALUMINUM
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
ETHYLENE
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–

ETHYLENE(contd)
diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
ETHYLENEBISSALICYLIDENEIMINE
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
ETHYLENEDIAMINE
The N–M–N bond angle in the chelate ring of ethylenediamine. The crystal structure of tetraaqua(ethylenediamine)nickel(II) nitrate, 654–8
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the $[(Cu(OPh)_2(en))_2].2PhOH$ dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Malonato(ethylenediamine) complexes of chromium(III): the structure of di–μ–hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
ETHYLENETRIAMINE
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
ETHYLTHIOCARBAMATENICKEL
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
EUROPIUM
Ruthenium–99 and europium–151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4–trifluoro–1–(2–thienyl)butane–1,3–dionate through adduct formation with cinchona alkaloids, 2369–73
EVAPN
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
EXCHANGE
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N–alkylphenothiazines, 484–6
Consecutive substitution in, and reduction of, η–allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9
Exchange interaction in tetrameric oxygen–bridged copper(II) clusters of the cubane type, 875–9
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2–diethylaminoethanolato)copper(II)]–tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
EXCHANGED
Crystal structure of a natural and a partially silver–exchanged heulandite, 1511–14
EXPLOSION
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
FERRACYCLOPENTENONATE
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
FERRACYCLOPENTENONE
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
FERRATE
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Synthesis and properties of bis(tert–butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of $LiCr[OCH(CMe_3)_2]_4.THF$, $Cr[OCH(CMe_3)_2]_4$, and $LiFe[OCH(CMe_3)_2]_4.(Me_3C)_2CHOH$, 1863–71
FERRIC
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
FERRICYANIDE
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
FERRITE
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
FERROCYANIDE
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
FERROUS
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
FLUORIDE
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
Crystal structure of bis(iodosyl trifluoride–iodyl trifluoride), 481–3
On the vibrational assignment and bond angles in chromyl fluoride 535–8
Thermal reactions of the mixed–valence iron fluorides, $Fe_2F_5.nH_2O$ 845–50
Ionic–covalent equilibriums in boron trihalide adducts. The $BF_2(hmpa)_2^+$ cation, 1142–4
Fluoride crystal structures. Part 34. Antimony pentafluoride–iodine trifluoride dioxide, 1734–6
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Bonding and structure of diphenyltellurium(IV) difluoride, 2306–8
FLUORO
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2

FLUORO(contd)
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
Spin density and bonding in the CrF_6^{3-}-ion in $K_2Na[CrF_6]$, 2348–53
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
FLUOROACETATE
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
A structural model for Lewis acids and bases. An analysis of the structural chemistry of the acetate and trifluoroacetate ions, 1118–23
FLUOROACETATO
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
FLUOROACETATOANTIMONY
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
FLUOROACETIC
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
FLUOROACETOANTIMONY
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
FLUOROACETYLACETONATE
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
FLUOROACETYLACETONATO
The trans influence and trans effect of the arsine group. The x–ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
FLUOROANTIMONY
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
FLUOROBISMUTHATE
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
FLUOROBORATE
Crystal structures of meso–ortho–phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
FLUOROBUTYNE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
FLUOROCHROMATE
Spin density and bonding in the CrF_6^{3-}-ion in $K_2Na[CrF_6]$, 2348–53
FLUORODIANTIMONATE
Iodine–127 Moessbauer spectra of diiodine undecafluorodiantimonate(1–) and some polyhalide anions, 1060–5
FLUORODIARSENATE
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
FLUORODITHIOETHER
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
FLUOROMANGANATE
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
FLUOROMOLYBDATE
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI–)], 289–91
FLUOROPENTANEDIONE
Kinetics and mechanisms of the reactions of vanadyl ion with β–diketones, 7–13
Kinetics and mechanism of the reactions of uranyl ion and β–diketones in methanol–water (9:1 v/v), 1502–10
FLUOROPHENYL
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
FLUOROPHENYLCYCLOPENTADIENE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
FLUOROPHENYLTELLURIUM
Bonding and structure of diphenyltellurium(IV) difluoride, 2306–8
FLUOROPHOSPHINE
Gas–phase molecular structure of bis(difluorophosphino)amine, determined by electron diffraction, 954–7
FLUOROPHOSPHINO
Derivatives of acetamide containing difluorophosphino groups, 1768–70
FLUOROPHOSPHINOAMINE
Gas–phase molecular structure of bis(difluorophosphino)amine, determined by electron diffraction, 954–7
FLUOROPHOSPHORANE
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
FLUOROPROPYNE
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
FLUOROTHIENYLBUTANEDIONE
Kinetics and mechanism of the reactions of uranyl ion and β–diketones in methanol–water (9:1 v/v), 1502–10
FLUXIONALITY
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of $[Pd_2Cl_4((Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$, 59–63
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
Preparation and carbon–13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5–C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Intramolecular rearrangement in η–allyl complexes of molybdenum(II) containing unidentate amine ligands, 1904–9
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in

FLUXIONALITY(contd)
[(PtXMe$_3$)$_2$(MeEEMe)] (E = S or Se) complexes, 2220–7
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
FORCE
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen-)cobalt complexes, 167–73
Temperature– and wavelength–dependent photochemistry of [Cr(CO)$_5$(NMe$_3$)] in argon and xenon matrixes. Evidence for the formation of [Cr(CO)$_5$] and novel [Cr(CO)$_4$(NMe$_3$)] complexes with three different types of symmetry, 1328–35
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
FORMALDEHYDE
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
FORMAMIDINIUM
Crystal and molecular structure of bis(N,N'–dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
FORMATION
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
The electronic spectra of the mixed mercury dihalides. Part 2. Identification, equilibrium and formation constants, and assignment of transitions, 209–15
Reactions of 1,1,1–tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
Thermochemistry of fluorine compounds. Part 5. Di–μ–oxobis[trifluorooxoiodine(VII)], 869–70
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Solution calorimetry of nitrosonium salts, 2415–17
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
FORMYLPYRIDINE
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
FREE
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
The interaction of amines with iron pentacarbonyl, 1461–6
FURAN
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
FURANYLIDENEBUTENEDIYL
Crystal and molecular structure of μ–carbonyl–μ–(1–3–η:1–σ,4–2'–η–(1,3–dimethyl–4–[5–oxo–4–phenyl–2(5H)–furan–2–ylidene]but–1–ene–1,3–diyl))bis(dicarbonylcobalt)(Co–Co), 435–9
FURFURYLAMINE
Study of ligand isomeric complexes of N–furfurylsalicylaldimine, 2319–22
FURFURYLSALICYLALDIMINE
Study of ligand isomeric complexes of N–furfurylsalicylaldimine, 2319–22
GADOLINIUM
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine–coordinate [M(bidentate ligand)$_3$(unidentate ligand)$_3$]$^{x\pm}$ system, 454–8
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16–hexaoxacyclooctadecane, 2191–8
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
GALLIUM
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5–nitrosalicylate ion system, 1124–8
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
GALVINOXYL
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–R'SO$_2$X reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
GERMANIUM
The crystal structure of potassium trioxalatogermanate(IV) monohydrate, 2051–2
GERMYL
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Crystal and molecular structures of silyl isocyanate (at –135°C) and of germyl isocyanate (at –95°C), 1838–44
GERMYLCYCLOPENTADIENE
Molecular structure of germylcyclopentadiene in the crystalline phase at 160 K and in the gas phase, 603–6
GERMYLMETHYLCYCLOPENTADIENE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
GLYCINE
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
GLYCOLATE
Crystal structure of tetra(glycolato)uranium(IV) dihydrate, a photoreduction product of uranyl ions in the presence of glycolic acid, 1182–5
GLYCYLHISTIDINE
Multiple forms of the copper(II)–carnosine complex, 590–6
GOLD
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
X–ray photoelectron spectra of some gold compounds, 767–70
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
GRAPHITE
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
GROUP
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(-

GROUP(contd)
I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a li[illegible]nd on the anion present, 736–42
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Metal carbonyl photochemistry. Part 1. Photolysis of the Group 6 hexacarbonyls in hydrocarbon glasses; the species $M(CO)_5$, $M(CO)_4$, $M(CO)_3$, and $[M(CO)_5(OH)_2]^-$, 1646–50
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5\text{–}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Preparation and properties of 1–adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
GUANINE
Synthesis and structure of methylmercury(II) complexes of 9–methylguanine, including the x–ray structural analysis of (9–methylguanine)methylmercury(II) nitrate, 1693–7
HALIDE
The electronic spectra of the mixed mercury dihalides. Part 1. Computational procedures for calculating spectra, for a new route to equilibrium and formation constants, and the resolved spectra, 205–8
The electronic spectra of the mixed mercury dihalides. Part 2. Identification, equilibrium and formation constants, and assignment of transitions, 209–15
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Soft–sphere ionic radii for alkali and halogenide ions, 645
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)–cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Low valent metal isocyanide complexes. 2. Oxidative reactions of pentakis(tert–butyl isocyanide)iron with alkyl, allyl, benzyl, fluoroalkyl, pentafluorophenyl halides, and $[Me_3O][BF_4]$ + $PhC{\equiv}CPh$. Isocyanide insertion reactions. Structure of $Fe(CNCMe_3)_3(1\text{–}4\text{–}\eta\text{–}C(:NCMe_3):C(Ph)C(Ph):C(:NCMe_3))$, 1779–88
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
HALO
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
Preparation and isomerization of dicarbonyldihalo[o–phenylenebis(dimethylarsine)]osmium complexes, 487–91
Structural and mechanistic studies of coordination compounds. Part 25. Synthesis and characterization of some octahedral haloamine and –thioether complexes of ruthenium(II) and –(III), 756–62
Photochemistry of chloro–, bromo–, and iodo–pentacarbonylmanganese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tetracarbonylhalomanganese species with a C_{2v} trigonal–bipyramidal structure, 1803–8
Reactivity of $[Co_4(CO)_{12}]$. Synthesis and characterization of tetracobalt carbonyl anions of general formula $[Co_4(CO)_{11}X]^-$, 1816–19
HALOAMMINECOBALT
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
HALODIMETHYLAMINE
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
HALOGEN
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Soft–sphere ionic radii for alkali and halogenide ions, 645
HALOGOLD
X–ray photoelectron spectra of some gold compounds, 767–70

HALOPALLADIUM
Selective cleavage of the two types of Pd–N bonds in di-μ-halobis[arylazooximatopalladium(II)], 1698–702
HALOPHOSPHORUS
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
HALOTRIMETHYLAMMONIUM
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
HEAT
Intramolecular charge-transfer decomposition of the μ-peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Encircling of metal ions by tetraaza macrocycles. Enthalpies of formation of high- and low-spin nickel(II) complexes of 14-membered ligands, 134–6
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine-, -arsine-, and -stibinedicarbonyl(1-2-η:3-4-η-1,4-diphenyl-1-azabuta-1,3-diene)iron, 634–7
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
A phosphorus-31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
Thermal reactions of the mixed-valence iron fluorides, $Fe_2F_5.nH_2O$ 845–50
Thermochemistry of fluorine compounds. Part 5. Di-μ-oxobis[trifluorooxoiodine(VII)], 869–70
Thermochemistry of metal complexes with the rigid ligand 1,3,5-cis,cis-triaminocyclohexane, 1055–9
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13-tetraazacyclohexadecane, 1722–5
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Solutions of hydrogen bromide in sulfolane, 2028–31
The chemistry of vitamin B_{12}. Part 18. Nature of the equilibriums exhibited by organocobalamins, 2267–73
Solution calorimetry of nitrosonium salts, 2415–17
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis-α-hydroxybenzylidenehydrazone(2-)-$N^1,N^{1'},O,O'$]nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl-aluminum and -gallium and the crystal and molecular structure of ([N-methyl-N-(nitroso-O')hydroxylamido-O]dimethylaluminum-O')trimethylaluminum, 2493–7
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16-hexaazacyclooctadecane ('18-azacrown-6'), 2536–8
HEMIN
Concentration- and solvent-dependent electron spin resonance signals and dimer formation of high-spin iron(III) porphyrins, 526–34
HEMOCYANIN
The (bis-2,6-[1-(2-imidazol-4-ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
HEPTACYANORHENATE
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
HEPTAFLUORODIARSENATE
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
HETEROCYCLE
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon-13 nuclear magnetic resonance spin-lattice relaxation study, 363–8
Equilibriums in complexes of N-heterocyclic molecules. Part 29. An electron spin resonance study of some N-heterocyclic complex ions of silver(II), 1277–81
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
The (bis-2,6-[1-(2-imidazol-4-ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis-α-hydroxybenzylidenehydrazone(2-)-$N^1,N^{1'},O,O'$]nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
HEULANDITE
Crystal structure of a natural and a partially silver-exchanged heulandite, 1511–14
HEXAFLUOROCHROMATE
Spin density and bonding in the CrF_6^{3-} ion in $K_2Na[CrF_6]$, 2348–53
HEXANITRATOIRIDATE
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
HEXAOXACYCLOOCTADECANE
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16-hexaoxacyclooctadecane, 2191–8
HEXENE
Tris(2-pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex-1-ene by rhodium complexes, 55–8
Organosilicon chemistry. Part 24. Homogeneous rhodium-catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
HISTAMINE
Binary and ternary complexes of copper(II) involving imidazole, histamine, and L-histidine as ligands, 1312–16
Mixed-ligand complex formation by copper(II) with imidazole derivatives and dipeptides in aqueous solution, 2138–42
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
HISTIDINE
Binary and ternary complexes of copper(II) involving imidazole, histamine, and L-histidine as ligands, 1312–16
Mixed-ligand complex formation by copper(II) with imidazole derivatives and dipeptides in aqueous solution, 2138–42
HMPA
Ionic-covalent equilibriums in boron trihalide adducts. The $BF_2(hmpa)_2^+$ cation, 1142–4
HOMOCARNOSINE
Multiple forms of the copper(II)–carnosine complex, 590–6
HOMOPOLYMER
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
HYDRATE
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine-coordinate [M(bidentate ligand)$_3$(unidentate ligand)$_3$]$^{n\pm}$ system, 454–8
HYDRATION
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
Hydration of complexon complexes of lanthanide cations, 2151–4
HYDRAZIDO
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem-dibromides, and from condensation of hydrazido(2-) complexes with aldehydes, 771–5
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans-bis[1,2-bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
Reactions of trans-bis[1,2-bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and -molybdenum with α,ω-dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15

HYDRAZINE
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
HYDRAZINO
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
HYDRAZINOBIPYRIDYL
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
HYDRAZINOPHENANTHROLINE
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
HYDRAZONE
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)]$, 1992–2000
HYDRIDE
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Complexes of rhodium and iridium with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
Improved syntheses of the hexanuclear clusters $[Ru_6(CO)_{18}]^{2-}$, $[HRu_6(CO)_{18}]^-$, and $H_2Ru_6(CO)_{18}$. The x–ray analysis of $[HRu_6(CO)_{18}]^-$, a polynuclear carbonyl containing an interstitial hydrogen ligand, 383–9
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Synthesis and crystal structure of hydrido(tetrahydroborato)tetrakis(trimethylphosphine)molybdenum(II), 467–70
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of $[RuCl_2(PPh_3)_3]$ and $[RuH(Cl)(PPh_3)_3]$ and disproportionation of a hydridochloro complex, 539–44
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu\text{–}SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
Ruthenium–99 and europium–151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5\text{–}C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Multinuclear magnetic resonance studies on μ–hydrido–μ–hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di–μ–hydridodihydridohexakis(trimethylphosphine)diruthenium(II) and tri–μ–hydridohexakis(trimethylphosphine)diruthenium(II) tetrafluoroborate, 2480–7
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
Indirect location of hydride ligands in metal cluster complexes, 2509–16
HYDRIDO
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3\text{–}B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu\text{–}SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)](3Os–Os); preparation and crystal structure, 716–20
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3)H]$, 1852–7
HYDRIDOIRON
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
HYDRIDOPLATINUM
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
HYDRIDORHODIUM
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
HYDRIDOTRIBORATE
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3\text{–}B_3H_7)(CO)H(PPh_3)_2]$, 196–200
HYDROBORATE
Synthesis and crystal structure of hydrido(tetrahydroborato)tetrakis(trimethylphosphine)molybdenum(II), 467–70
HYDROFORMYLATION
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
HYDROFURYL
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
HYDROGEN
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Solutions of hydrogen bromide in sulfolane, 2028–31
HYDROGENATION
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
The synthesis, properties, and the crystal and molecular structures of five–coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
HYDROGENBISDIMETHYLACETAMIDE
A combined neutron and x–ray diffraction study of hydrogenbis(N–N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
HYDROLYSIS
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of $[RuCl_2(PPh_3)_3]$ and $[RuH(Cl)(PPh_3)_3]$ and disproportionation of a hydridochloro complex, 539–44
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81

HYDROLYSIS(contd)
The hydrolysis of metal ions. Part 3. Lead(II), 1577–81
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
Kinetics of base hydrolysis of α–amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics of solvolysis of the trans–dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
Solution calorimetry of nitrosonium salts, 2415–17
Kinetics and mechanism of the hydrolysis of α–amino acid esters in mixed ligand complexes with copper(II) ethylenediaminemonoacetate, 2452–5
HYDROOCTABORATE
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
HYDROPEROXIDE
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
HYDROPYRIDINE
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
HYDROPYRIMIDINONE
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
HYDROSILATION
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
HYDROSULFIDE
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
HYDROTHIOPHENE
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
HYDROXAMATE
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
HYDROXIDE
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
HYDROXO
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) $[BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) $[BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
HYDROXY
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–dioxane(1/3), di–μ–hydroxobis[aquatrichlorotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatribromotin(IV)]–1,8–epoxy–p–menthane(1/4), di–μ–hydroxobis[aquatrichlorotin(IV)]–water(1/4), and cis–diaquatetrachlorotin(IV)–water(1/3) 949–53
Multinuclear magnetic resonance studies on μ–hydrido–μ–hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di–μ–hydridodihydridohexakis(trimethylphosphine)diruthenium(II) and tri–μ–hydridohexakis(trimethylphosphine)diruthenium(II) tetrafluoroborate, 2480–7
HYDROXYACETYLENE
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
HYDROXYALKYL
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
HYDROXYL
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
HYDROXYLAMINE
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Kinetics and mechanism of the oxidation of hydroxylamine by aquavanadium(V) ions in aqueous perchlorate media, 1532–6
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
HYDROXYLAMINEDISULPHONATE
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
HYDROXYLAMINETRISULFONATE
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
HYDROXYLATION
Thermodynamic studies on the complexation reaction of copper(II) macrocyclic tetraamine complexes with hydroxide ion, 1349–51
HYDROXYMETHYLPROPANOIC
Kinetics of the oxidation of 2–hydroxy–2–methylpropanoic acid by aquavanadium(V) ions in aqueous perchlorate media, 2143–6
HYDROXYPHENYL
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
HYDROXYPHENYLIMIDAZOLINE
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
HYDROXYPHENYLRHODANINE
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
IIB
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'–bipyridyl, 1664–7
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
IMIDAZOLE
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
Binary and ternary complexes of copper(II) involving imidazole, histamine, and L–histidine as ligands, 1312–16
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Silver(I) imidazole perchlorate. An $(Ag^+)_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
IMIDAZOLESILVER
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11

IMIDAZOLINE
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
IMIDE
Crystal and molecular structure of bis(tetrasulfur tetraimide)silver(-I) perchlorate sesquihydrate, 355–9
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
IMIDO
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
IMIDOSULFUR
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
IMINE
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
IMINIOCARBENE
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
IMINIUM
Reactions of $[Fe_2(\eta\text{–dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]$I, 186–91
IMINODIACETATE
Properties and structural characterization of copper(II) mixed complexes with 2,2'–bipyridyl and iminodiacetate or pyridine–2,6–dicarboxylate, 369–75
IMINOETHYLPYRIDINE
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
IMPURITY
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
INDENYL
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
INDIUM
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
INDO
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
INHIBITION
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
INHIBITOR
Interaction of cis–diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
INSERTION
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
INTERACTION
Exchange interaction in tetrameric oxygen–bridged copper(II) clusters of the cubane type, 875–9
INTERMEDIATE
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
INTERVALENCE
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
INTRAMOL
Stereochemically nonrigid silanes, germanes, and stannanes. Part 6. Poly(cyclopentadienyl)silanes. A comparison of thermodynamic parameters derived from approximate methods with those obtained using full lineshape analysis of carbon–13 nuclear magnetic resonance data, 224–8
INVERSION
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
IODATE
Kinetics of oxidation of aquairon(2+) by iodate in dilute perchloric acid solution, 797–803
IODIDE
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Application of the iodide–ion–selective electrode to a kinetic study of the periodate–iodide reaction, 1269–71
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
Crystal structure of tris(NN–diethyldithiocarbamato)iron(IV) pentaiodide, 1928–31
IODINATED
Preparation of a conducting iodinated poly(sulfur nitride), 937–41

IODINE
Thermochemistry of fluorine compounds. Part 5. Di-μ-oxobis[trifluorooxoiodine(VII)], 869–70
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Iodine–127 Moessbauer spectra of diiodine undecafluorodiantimonate(1–) and some polyhalide anions, 1060–5
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Fluoride crystal structures. Part 34. Antimony pentafluoride–iodine trifluoride dioxide, 1734–6
IODO
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of [$MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2$-)] (M = Mo or W; n = 1–3), 440–6
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of [$MnPt(\mu\text{-}I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]$], 1625–9
Crystal structure of tri–μ–carbonyloctacarbonyliodo–tetrahedro–tetracobaltate(1–) as its tetraethylammonium salt, 1820–2
Stereochemistry of [M(bidentate ligand)$_2$(unidentate ligand)]. Crystal structure of iodobis(pyrrolidinyldithiocarbamato)iron(II)–iodine (2/1), 1921–7
IODOSYL
Crystal structure of bis(iodosyl trifluoride–iodyl trifluoride), 481–3
IODYL
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
Crystal structure of bis(iodosyl trifluoride–iodyl trifluoride), 481–3
IODYLBENZENE
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
ION
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–[$Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
IONIC
Soft–sphere ionic radii for alkali and halogenide ions, 645
IONIZATION
Ionic–covalent equilibriums in boron trihalide adducts. The $BF_2(hmpa)_2^+$ cation, 1142–4
IR
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen)cobalt complexes, 167–73
Molybdenum(VI) complexes from diols and aminoalcohols: the occurrence of molybdenum dioxide and dimolybdenum tri– and pentoxide core structures, 248–52
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides [$MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n$] (n = 1, 2, or 3), 412–15
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
Vibrational spectra and crystal and molecular structure of trans,cis–S–methyl dithiocarbazate, a second conformer, 423–5
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
On the vibrational assignment and bond angles in chromyl fluoride 535–8
Synthesis and crystal structure of tetramethylammonium μ–pentachlorothiophenolatobis[pentacarbonyltungstate(0)], 570–3
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of [$(PtH(\mu\text{-}SiMe_2)[P(C_6H_{11})_3])_2$], 659–66
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'–bi(nido–decaboranyl) and 2,6'–bi(nido–decaboranyl), 790–6
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Temperature– and wavelength–dependent photochemistry of [$Cr(CO)_5(NMe_3)$] in argon and xenon matrixes. Evidence for the formation of [$Cr(CO)_5$] and novel [$Cr(CO)_4(NMe_3)$] complexes with three different types of symmetry, 1328–35
Photochemistry of [$Fe(CO)_4L$] complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} [$Fe(CO)_3L$] and the reversible infrared–induced isomerization of C_s [$Fe(CO)_3L$], 1336–41
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
The interaction of amines with iron pentacarbonyl, 1461–6
Vibrational spectroscopy at very high pressures. Part 26. An infrared study of the metastable phases of $Ca[CO_3]$, 1482–6
Derivatives of acetamide containing difluorophosphino groups, 1768–70
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Photochemistry of chloro–, bromo–, and iodo–pentacarbonylmanganese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tetracarbonylhalomanganese species with a C_{2v} trigonal–bipyramidal structure, 1803–8
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: [$M(S_2N_2H)_2$], [$M(S_2N_2H)(S_3N)$], and [$M(S_3N)_2$] (M = Co, Ni, Pd, or Pt), 1910–16
Vibrational spectroscopic study of trimethylarsine–boron trihalide

IR(contd)
adducts, 2016–19
Hexaisothiocyanates of vanadium(II), 2042–3
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes $([Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane–1,2–diamine and pn = propane 1,2–diamine), 2498–502
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
IRIDATE
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
IRIDATETRABORANE
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3–B_3H_7)(CO)H(FPh_3)_2]$, 196–200
IRIDIUM
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3–B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Complexes of rhodium and iridium with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
Pentamethylcyclopentadienylrhodium and –iridium complexes. Part 26. Dicationic η^3–aniline and η^6–anisole complexes, 1048–54
Aryltriazenido complexes. Crystal and molecular structure of trans–carbonyl(1,3–di–p–tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
IRON
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Molecular structure of dimeric iron trichloride in the vapor phase as determined by electron diffraction, 87–9
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
Reactions of $[Fe_2(\eta–dienyl)_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis–$[Fe_2(\eta–C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]I$, 186–91
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
Concentration– and solvent–dependent electron spin resonance signals and dimer formation of high–spin iron(III) porphyrins, 526–34
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Kinetics of oxidation of aquairon(2+) by iodate in dilute perchloric acid solution, 797–803
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Thermal reactions of the mixed–valence iron fluorides, $Fe_2F_5.nH_2O$ 845–50
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
Bonding properties of trinuclear metal carbonyls, 1005–11
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
endo Addition to dienylium metal complexes, 1135–41
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33

IRON(contd)
The interaction of amines with iron pentacarbonyl, 1461–6
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x-ray crystal structure of $[(Fe(CO)_3[\eta^5\text{-}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one-electron oxidant, 1710–15
Low valent metal isocyanide complexes. 2. Oxidative reactions of pentakis(tert-butyl isocyanide)iron with alkyl, allyl, benzyl, fluoroalkyl, pentafluorophenyl halides, and $[Me_3O][BF_4]$ + PhC:CPh. Isocyanide insertion reactions. Structure of $Fe(CNCMe_3)_3(1\text{–}4\text{–}\eta\text{–}C(:NCMe_3):C(Ph)C(Ph):C(:NCMe_3))$, 1779–88
Protonation of pentakis(tert-butyl isocyanide)iron, 1789–90
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)\text{–}BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
Stereochemistry of [M(bidentate ligand)$_2$(unidentate ligand)]. Crystal structure of iodobis(pyrrolidinyldithiocarbamato)iron(II-I)–iodine (2/1), 1921–7
Crystal structure of tris(NN-diethyldithiocarbamato)iron(IV) pentaiodide, 1928–31
Bis adducts of phthalocyaninatoiron(II) with Group 6A axial donor atoms. Crystal and molecular structure of sulfur-bonded bis(dimethyl sulfoxide)phthalocyaninatoiron(II)–dimethyl sulfoxide (1/2), 1965–9
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation-state fluorides and its reaction with trimethyl phosphite, 2001–5
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane-like cluster dimers, 2354–9
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane-like cluster dimers, 2360–8
Kinetics of peroxodisulfate oxidation of low-spin iron(II) complexes in binary aqueous mixtures, 2442–6
Mass spectrometry of compounds of the type $[Fe(CO)_2(\eta\text{–}C_5H_5)R]$ (R = alkyl), 2488–92
Phosphaferrocenes as phosphorus ligands. Crystal and molecular structure of tetracarbonyl(3,4-dimethylphosphaferrocene-P)iron 2522–5
ISOCYANATE
Crystal and molecular structures of silyl isocyanate (at −135°C) and of germyl isocyanate (at −95°C), 1838–44
ISOCYANATO
Crystal structure of bis(isocyanato)(2,2:6',2''-terpyridyl)cobalt(II): stereochemistry of [M(tridentate ligand)(unidentate ligand)$_2$] complexes, 1932–8
ISOCYANIDE
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert-butyl isocyanide)dicobalt, 80–6
Reactions of $[Fe_2(\eta\text{-dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis-$[Fe_2(\eta\text{–}C_5H_4Me)_2(CO)_3(C(NMe_2)I)]$, 186–91
Preparation and carbon-13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Low valent metal isocyanide complexes. 2. Oxidative reactions of pentakis(tert-butyl isocyanide)iron with alkyl, allyl, benzyl, fluoroalkyl, pentafluorophenyl halides, and $[Me_3O][BF_4]$ + PhC:CPh. Isocyanide insertion reactions. Structure of $Fe(CNCMe_3)_3(1\text{–}4\text{–}\eta\text{–}C(:NCMe_3):C(Ph)C(Ph):C(:NCMe_3))$, 1779–88
Protonation of pentakis(tert-butyl isocyanide)iron, 1789–90
ISOMER
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'-bi(nido-decaboranyl) and 2,6'-bi(nido-decaboranyl), 790–6
ISOMERISM
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Interaction of allylic alcohols with halo-bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Palladium(II) complexes derived from the ligands 2,2,N,N-tetramethylpent-4-enylamine and 2,2-dimethylpent-4-enyl methyl sulfide. Crystal structures of dichloro[2,2-dimethylpent-(E)-3-enyl] methyl sulfide]palladium(II) and chloro[1-3-η-syn-1-(1,1'-dimethyl-2'-methylthioethyl)allyl]palladium(II), 137–44
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Nickel complexes of the methyl esters of dithiocarbazic and N-substituted dithiocarbazic acids, 499–502
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Study of ligand isomeric complexes of N-furfurylsalicylaldimine, 2319–22
ISOMERIZATION
Palladium(II) complexes derived from the ligands 2,2,N,N-tetramethylpent-4-enylamine and 2,2-dimethylpent-4-enyl methyl sulfide. Crystal structures of dichloro[2,2-dimethylpent-(E)-3-enyl] methyl sulfide]palladium(II) and chloro[1-3-η-syn-1-(1,1'-dimethyl-2'-methylthioethyl)allyl]palladium(II), 137–44
Organosilicon chemistry. Part 24. Homogeneous rhodium-catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Preparation and isomerization of dicarbonyldihalo[o-phenylenebis-(dimethylarsine)]osmium complexes, 487–91
endo Addition to dienylium metal complexes, 1135–41
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Temperature- and wavelength-dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared-induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
Preparation of the complexes trans-$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Transition metal–diene complexes. Part 3. Isomerization of methyl-substituted acyclic and cyclic 1,3- and 1,4-dienes coordinated to rhodium(I), 2053–9
ISONITRILE
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N-substituted dithiocarbazic acids, 499–502
ISOPRENE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5-indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5-indenyl(1–2:3–4-η^4-[6-endo-propen-2-yl-1,2,3,4-tetrakis(trifluoromethyl)cyclohexa-1,3-diene])rhodium formed in a cyclo-cotrimerisation reaction, 962–72
ISOPROPYLATION
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
ISOPROPYLDIAZADIENE
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of $[RuCl_2(PPh_3)_3]$ and $[RuH(Cl)(PPh_3)_3]$ and disproportionation of a hydridochloro complex, 539–44
ISOTHIOCYANATE
Hexaisothiocyanates of vanadium(II), 2042–3
ISOTROPIC
One-electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7

IVA
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon-13 nuclear magnetic resonance spectroscopy, 159–62
IVB
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
KETAZINE
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN-dimethylhydrazones, ketazines, and oxime O-allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)]$, 1992–2000
KETONE
Kinetics and mechanisms of the reactions of vanadyl ion with β-diketones, 7–13
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
Kinetics and mechanism of mono- and diolefin exchange at five-coordinate iron(0), 999–1004
KETOPHOSPHINE
Complexes of nickel(II), palladium(II), and platinum(II) with the β-ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Complexes of rhodium and iridium with the β-ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
KINETICS
Kinetics and mechanisms of the reactions of vanadyl ion with β-diketones, 7–13
Intramolecular charge-transfer decomposition of the μ-peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans-substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner-sphere versus outer-sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis- and trans-ruthenium(II) amine complexes, 128–33
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
Comparison of structure and reactivity of bis(2-aminoethyl)amine- and bis(2-aminoethyl)amidochlorogold(III) complexes, 220–3
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N-alkylphenothiazines, 484–6
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Consecutive substitution in, and reduction of, η-allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11-tetramethyl-1,4,8,11-tetraazacyclotetradecane)nickel(II) and -cobalt(II) ions towards associative solvent exchange, 574–8
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Initial state and transition state effects in the mercury(II)-catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine-, -arsine-, and -stibinedicarbonyl(1-2-η:3-4-η-1,4-diphenyl-1-azabuta-1,3-diene)iron, 634–7
Pulse and γ-radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3-tetramethylurea)scandium(III) ion and its N,N-dimethylacetamide analog, 699–704
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido-, dinitrogen-, and ethyleneiron complexes, 705–8
Kinetics of the silver(I)-catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
A phosphorus-31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Kinetics of oxidation of aquairon(2+) by iodate in dilute perchloric acid solution, 797–803
Thermal reactions of the mixed-valence iron fluorides, $Fe_2F_5.nH_2O$ 845–50
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation-reduction reactions, 854–9
Kinetics of ligand exchange between ethylenedinitrilotetraacetatocuprate(II) and triethylenetetraaminecadmium(II), 958–61
Kinetics and mechanism of mono- and diolefin exchange at five-coordinate iron(0), 999–1004
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom-transfer redox process, 1017–21
Studies on the μ-(NN')-ethylenediaminetetraacetatodi-μ-oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)-5-nitrosalicylate ion system, 1124–8
Application of the iodide-ion-selective electrode to a kinetic study of the periodate-iodide reaction, 1269–71
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
Reaction of electrogenerated NN'-ethylenebis(salicylideneiminato)-cobaltate(I) with tert-butyl bromide and tert-butyl chloride, 1489–93
Kinetics and mechanism of the reactions of uranyl ion and β-diketones in methanol–water (9:1 v/v), 1502–10
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
Kinetics and mechanism of the oxidation of hydroxylamine by aquavanadium(V) ions in aqueous perchlorate media, 1532–6
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
Interaction of cis-diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro- and bromo-pentaamminecobalt(III) and of -pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Effects of added alkali metal and alkylammonium bromides on the kinetics of reaction between the $[PdCl(Et_2N(CH_2)_2NH(CH_2)_2NEt_2)]^+$ cation and bromide ion in aqueous solutions, 1809–11
Kinetics of the displacement of chloride in 5-substituted-1,10-phenanthrolinedichloropalladium(II) complexes, 2044–5
Transition metal–diene complexes. Part 3. Isomerization of methyl-substituted acyclic and cyclic 1,3- and 1,4-dienes coordinated to rhodium(I), 2053–9
Kinetics of the oxidation of 2-hydroxy-2-methylpropanoic acid by aquavanadium(V) ions in aqueous perchlorate media, 2143–6
Kinetics and mechanism of diene exchange at six-coordinate chromium, 2237–40
Kinetics of orthoperiodate dimerization studied by temperature-jump spectrophotometry, 2250–4
Mercury(II)- and nitrosyl-induced aquation of anionopentaamminecobalt(III) species. Reactions of the t-$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt-

KINETICS(contd)
carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
Kinetics of base hydrolysis of α–amino acid esters in mixed ligand complexes with [glycylglycinato(2–)]copper(II), 2385–7
Kinetics of solvolysis of the trans–dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
Kinetics and mechanism of the hydrolysis of α–amino acid esters in mixed ligand complexes with copper(II) ethylenediaminemonoacetate, 2452–5
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
KROGMANN
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]$-$Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
KRYPTON
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
LANTHANIDE
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Studies of lanthanide(III) pyridine–2,6–dicarboxylate complexes in aqueous solution. Part 1. Structures and proton nuclear magnetic resonance spectra, 597–602
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400
Electron relaxation rates of lanthanide aqua cations, 2147–50
Hydration of complexon complexes of lanthanide cations, 2151–4
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16–hexaoxacyclooctadecane, 2191–8
LANTHANUM
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Complexes of lanthanide ions with the crown ether 1,4,7,10,13,16–hexaoxacyclooctadecane, 2191–8
LATTICE
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
LEAD
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
The hydrolysis of metal ions. Part 3. Lead(II), 1577–81
LENGTH
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Chlorine–35 nuclear quadrupole resonance studies on some tin(IV) chloride adducts, 1164–8
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
LEVEL
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
LEWIS
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
LIGAND
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Iodine–127 Moessbauer spectra of diiodine undecafluorodiantimonate(1–) and some polyhalide anions, 1060–5
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)]$.EtOH, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
Transition metal binding sites and ligand parameters, 2032–8
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ ion, 2339–47
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
LINEAR
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
LITHIUM
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
LOCATION
Indirect location of hydride ligands in metal cluster complexes, 2509–16
LUMINESCENCE
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4–trifluoro–1–(2–thienyl)butane–1,3–dionate through adduct formation with cinchona alkaloids, 2369–73
LUTETIUM
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
MACROCYCLE
Encircling of metal ions by tetraaza macrocycles. Enthalpies of formation of high– and low–spin nickel(II) complexes of 14–

MACROCYCLE(contd)
membered ligands, 134–6
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]-crown-6-type. Crystal structure of aquadiperchlorato(1,4,10,13-tetraoxa-7,16-dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Structural and me.hanistic studies of coordination compounds. Part 25. Synthesis and characterization of some octahedral haloamine and -thioether complexes of ruthenium(II) and -(III), 756–62
Chemistry of polydentate ligands. Part 9. Preparation and properties of Group 2B cation complexes with multidentate ligands based on 2,2'-bipyridyl, 1664–7
The synthesis, properties, and the crystal and molecular structures of five-coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
MACROCYCLIC
The synthesis, properties, and the crystal and molecular structures of five-coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
MAGNESIUM
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Metal-phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)- and diaquabis(p-chlorophenoxyacetato)manganese(II), -cobalt(II), and -magnesium(II), 2462–6
MAGNETIC
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon-13 nuclear magnetic resonance spin-lattice relaxation study, 363–8
Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9
Exchange interaction in tetrameric oxygen-bridged copper(II) clusters of the cubane type, 875–9
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
A magnetic susceptibility study of spin-state transitions in rare earth trioxocobaltates(III), 1397–400
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the $[(Cu(OPh)_2(en))_2].2PhOH$ dimer, with a 'normal' magnetic moment at room temperature, 1419–24
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2-diethylaminoethanolato)copper(II)]-tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Electron relaxation rates of lanthanide aqua cations, 2147–50
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
MAGNETISM
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9
Exchange interaction in tetrameric oxygen-bridged copper(II) clusters of the cubane type, 875–9
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
Hexaisothiocyanates of vanadium(II), 2042–3
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''-tetra(2-cyanoethyl)-1,4,8,11-tetraazacyclotetradecane with nickel(II), 2117–20
Magnetic properties and superexchange in single chloride-bridged copper(II) chain compounds, 2121–4
Bivalent metal complexes of 1,11-diamino-3,6,9-trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
MAGNETIZATION
Formation of lead-bearing ferrite in aqueous suspension by air oxidation, 825–8
MALONATE
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane-water, 41–5
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
Malonato(ethylenediamine) complexes of chromium(III): the structure of di-μ-hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
MALONATOMANGANATE
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
MANGANATE
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
MANGANESE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1-3;6-7-η-8-endo-trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N-alkylphenothiazines, 484–6
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
Manganese 3d and 4s electron-density distribution in phthalocyaninatomanganese(II), 1515–25
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese-platinum, -palladium, and -nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu-(1-\sigma,1-2-\eta-C:CH-CH_2-CH_2-O))Pt(PMe_3)_2]$ (Mn-Pt), 1601–8
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo-diplatinum-chromium and -tungsten complexes. Crystal structure of $[Pt_2W(\mu-C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of $[MnPt(\mu-I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]]$, 1625–9
Protonation of pentakis(tert-butyl isocyanide)iron, 1789–90
Photochemistry of chloro-, bromo-, and iodo-pentacarbonylmanganese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tetracarbonylhalomanganese species with a C_{2v} trigonal-bipyramidal structure, 1803–8
Coordination chemistry of (8-methyl-2-quinolylmethyl)di-tert-butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Reactions of 1-3-η-allylmanganese and -rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1-3-η-allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Synthesis and crystal structure of bis[σ-tricarbonyl(η^5-cyclopentadienyl)manganese]bis(η^5-cyclopentadienyl)titanium, 2315–17
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl- and acetyltetracarbonylmanganese species, 2323–32
Metal-phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)- and diaquabis(p-chlorophenoxyacetato)manganese(II), -cobalt(II), and -magnesium(II), 2462–6

MATRIX
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ co mplexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
MECHANISM
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
MERCURY
The electronic spectra of the mixed mercury dihalides. Part 1. Computational procedures for calculating spectra, for a new route to equilibrium and formation constants, and the resolved spectra, 205–8
The electronic spectra of the mixed mercury dihalides. Part 2. Identification, equilibrium and formation constants, and assignment of transitions, 209–15
Metal carbonyl chemistry. Part 27. Formation of $[Co_3(CCl)(CO)_9]$ by reaction of the carbene precursor $Hg(CCl_3)Ph$ with octacarbonyldicobalt, 403–6
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], $[Hg_2Me_2(S_2C_6H_{10})]$, 1471–4
Synthesis and structure of methylmercury(II) complexes of 9–methylguanine, including the x–ray structural analysis of (9–methylguanine)methylmercury(II) nitrate, 1693–7
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)–BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_3(NCCH_3)_4]$, 1917–20
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
METAL
Stability and structure of transition metal complexes of azoles in aqueous solutions. Part 21. A comparison of the complex–forming capacity of 1,2–dimethylimidazole with that of other 1,3–diazoles, 24–8
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3–B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Reactions of 1,1,1–tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Soft–sphere ionic radii for alkali and halogenide ions, 645
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Preparation and properties of 1–adamantoxides, 2–adamantoxides, and 1–adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1–adamantoxo)dimethylaminemolybdenum(IV), 901–10
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Bonding properties of trinuclear metal carbonyls, 1005–11
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Bonding studies of derivatives of pentaborane(9) through self–consistent charge calculations, 1236–42
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
A new kind of metal incorporation in porphyrins during mass spectron·etric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Influence of solvation on the initial and transition states for anation reactions of transition metal complexes in mixed aqueous solvents 1494–501
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Synthesis and properties of bis(tert–butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of $LiCr[OCH(CMe_3)-2]_4.THF$, $Cr[OCH(CMe_3)_2]_4$, and $LiFe[OCH(CMe_3)_2]_4.(Me_3C)_2-CHOH$, 1863–71
Preparation and properties of 1–adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Transition metal binding sites and ligand parameters, 2032–8
Some transition metal complexes derived from 1,9–bis(tritylthio)–3,7–diazanonane and the crystal structure of bis[(3,7–diazanonane–1,9–dithiolato–N,N',S,S'–nickel)–S,S']palladium(II), 2075–80
Study of ligand isomeric complexes of N–furfurylsalicylaldimine, 2319–22
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
Bivalent metal complexes of 1,11–diamino–3,6,9–trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
Indirect location of hydride ligands in metal cluster complexes, 2509–16
A physicochemical study of the copper(II) chelates of 3–

METAL(contd)
hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16–hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
METALATION
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of $[Pd_2Cl_4((Me_3C)_2P-CH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$, 59–63
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)]$, 1992–2000
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
METALLOPORPHYRIN
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
METHANE
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
METHANETRISULFONATE
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
METHANOL
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
METHOXIDE
endo Addition to dienylium metal complexes, 1135–41
METHOXY
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
METHOXYBENZOYLHYDRAZONE
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
METHOXYCYCLOHEXADIENE
endo Addition to dienylium metal complexes, 1135–41
METHOXYETHYL
The trans influence and trans effect of the arsine group. The x–ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
METHYL
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)molybdenum(II)], 229–34
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Vibrational spectra and crystal and molecular structure of trans,cis–S–methyl dithiocarbazate, a second conformer, 423–5
Synthesis and fluxional character of complexes of the type $[M_2(cp)_2(CO)_3(CNR)]$ (M = Fe or Ru, cp = η–C_5H_5), 503–10
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Pentamethylcyclopentadienylrhodium and –iridium complexes. Part 26. Dicationic η^5–aniline and η^6–anisole complexes, 1048–54
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2–N:C(–S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
Complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Group 3A tetrahydroborates. Part 3. The molecular structure of methylaluminum bis(tetrahydroborate) in the gas phase as determined by electron diffraction, 1374–8
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1,2–dimercaptocyclohexanebis[methylmercury(II)], $[Hg_2Me_2(S_2C_6H_{10})]$, 1471–4
Synthesis and structure of methylmercury(II) complexes of 9–methylguanine, including the x–ray structural analysis of (9–methylguanine)methylmercury(II) nitrate, 1693–7
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
METHYLACETAMIDE
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
A combined neutron and x–ray diffraction study of hydrogenbis(N–N–dimethylacetamide) tetrachloroaurate(III) revealing a short hydrogen bond, 750–5
METHYLALLYL
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Intramolecular rearrangement in η–allyl complexes of molybdenum(II) containing unidentate amine ligands, 1904–9

METHYLAMINE
Temperature- and wavelength-dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared-induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
METHYLAMINOETHYLPYRIDINE
Magnetic properties and superexchange in single chloride-bridged copper(II) chain compounds, 2121–4
METHYLARSINE
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
METHYLATION
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
METHYLCYCLOBUTADIENE
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
METHYLCYCLOPENTADIENE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon-13 nuclear magnetic resonance spectroscopy, 159–62
METHYLCYCLOPENTADIENYL
Pentamethylcyclopentadienylrhodium and -iridium complexes. Part 26. Dicationic η^5-aniline and η^6-anisole complexes, 1048–54
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl-like ligands. Part 3. Dicarbonylnitrosyl(η-pentamethylcyclopentadienyl) complexes, 1253–8
METHYLDIETHYLENETRIAMINE
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
METHYLDITHIOCARBAZATE
Thermal behavior and crystal structure of dichlorobis(methyl 2-methyldithiocarbazate-N^3S)cobalt(II)–methyl 2-methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot 0.5[NH_2NMeC(=S)SMe]$, 1893–7
METHYLENE
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) $[BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) $[BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
METHYLENECYCLOPROPANE
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5-indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5-indenyl(1-2:3-4-η^4-[6-endo-propen-2-yl-1,2,3,4-tetrakis(trifluoromethyl)cyclohexa-1,3-diene])rhodium formed in a cyclo-cotrimerisation reaction, 962–72
METHYLFORMAMIDINE
Crystal and molecular structure of bis(N,N'-dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
METHYLGLYOXIMATOCOBALT
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
METHYLGUANINE
Synthesis and structure of methylmercury(II) complexes of 9-methylguanine, including the x-ray structural analysis of (9-methylguanine)methylmercury(II) nitrate, 1693–7
METHYLGUANINEMERCURY
Synthesis and structure of methylmercury(II) complexes of 9-methylguanine, including the x-ray structural analysis of (9-methylguanine)methylmercury(II) nitrate, 1693–7
METHYLHYDRAZINO
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
METHYLHYDRAZINOPHENANTHROLINE
Chemistry of polydentate ligands. Part 5. Complexes of 2,9-dihydrazino derivatives of 1,10-phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high-spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
METHYLIMIDAZOLE
Stability and structure of transition metal complexes of azoles in aqueous solutions. Part 21. A comparison of the complex-forming capacity of 1,2-dimethylimidazole with that of other 1,3-diazoles, 24–8
METHYLIMINIUM
Reactions of $[Fe_2(\eta\text{-dienyl})_2(CO)_{4-n}(CNR)_n]$ complexes (dienyl = C_5H_5, C_5H_4Me, or C_9H_7; R = alkyl or benzyl; n = 1 or 2) with alkyl halides and other alkylating agents. The crystal structure of cis-$[Fe_2(\eta\text{-}C_5H_4Me)_2(CO)_3(C(NMe_2)\mu)]$I, 186–91
METHYLMANGANESE
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl- and acetyltetracarbonylmanganese species, 2323–32
METHYLNAPHTHALENE
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6-naphthalene)chromium(0) and its arene replacement reactions, 991–5
METHYLNIOBIUM
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
METHYLNITROSOANILINE
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N-alkyl-N-nitrosoanilines, 2282–7
METHYLNITROSOHYDROXYLAMIDO
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl-aluminum and -gallium and the crystal and molecular structure of ([N-methyl-N-(nitroso-O')hydroxylamido-O]dimethylaluminum-O')trimethylaluminum, 2493–7
METHYLPENTYL
Palladium(II) complexes derived from the ligands 2,2,N,N-tetramethylpent-4-enylamine and 2,2-dimethylpent-4-enyl methyl sulfide. Crystal structures of dichloro[2,2-dimethylpent-(E)-3-enyl] methyl sulfide]palladium(II) and chloro[1-3-η-syn-1-(1,1'-dimethyl-2'-methylthioethyl)allyl]palladium(II), 137–44
METHYLPHOSPHINE
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X-ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
METHYLPROPANETHIOL
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$-1,3 and the crystal structure of [2,6-bis(tert-butylthiomethyl)phenyl-C^1,S,S']chloropalladium(II), 2312–14
METHYLQUINOLYLMETHYL
Coordination chemistry of (8-methyl-2-quinolylmethyl)di-tert-butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
METHYLQUINOLYLMETHYLPHOSPHINE
Coordination chemistry of (8-methyl-2-quinolylmethyl)di-tert-butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
METHYLSILYLACETAMIDE
Derivatives of acetamide containing difluorophosphino groups, 1768–70
METHYLSILYLAMIDO
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15

METHYLSILYLCYCLOPENTADIENE
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
METHYLSILYLETHANE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
METHYLSILYLMETHYL
Synthesis and crystal and molecular structure of bis(trimethylsilylmethylidyne)tetrakis(trimethylsilylmethyl)dirhenium (Re–Re), 1797–9
METHYLSILYLMETHYLIDYNE
Synthesis and crystal and molecular structure of bis(trimethylsilylmethylidyne)tetrakis(trimethylsilylmethyl)dirhenium (Re–Re), 1797–9
METHYLTETRAAZACYCLOTETRADECANE
Thermodynamic studies on the complexation reaction of copper(II) macrocyclic tetraamine complexes with hydroxide ion, 1349–51
METHYLTETRAHYDROFURAN
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
METHYLTIN
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
METHYLTRISTRIFLUOROMETHYLPYRAN
Synthesis of platinum complexes of 2–methyl–2,4,6–tris(trifluoromethyl)pyran. X–ray crystal structure of (cycloocta–1,5–diene)[2–methyl–2,4,6–tris(trifluoromethyl)pyran]platinum, 2095–101
METHYLUREA
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
MIGRATION
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
MO
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2–N:C(–S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
Bonding studies of derivatives of pentaborane(9) through self–consistent charge calculations, 1236–42
Crystal structure and electronic properties of ammine[tris(2–aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Spin density and bonding in the $CoCl_4^{2-}$ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ion, 2339–47
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
MOESSBAUER
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Ruthenium–99 and europium–151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Iodine–127 Moessbauer spectra of diiodine undecafluorodiantimonate(1–) and some polyhalide anions, 1060–5
An antimony–121 Moessbauer spectroscopic study of some dihalo(halo–substituted benzene–1,2–diolato)antimonate(III) complexes and of some tetrabromoantimonates(III), 1542–4
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Antimony–121 Moessbauer investigations of tin–antimony oxides, 2241–5
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
MOL
Silicate species in solution. Part 2. The structure of polymeric species, 399–402
Molecular structure of germylcyclopentadiene in the crystalline phase at 160 K and in the gas phase, 603–6
Proton nuclear magnetic resonance study of the self–association of 1,10–phenanthroline, 2,2'–bipyridyl, and their zinc(II) complexes 1079–86
Group 3A tetrahydroborates. Part 3. The molecular structure of methylaluminum bis(tetrahydroborate) in the gas phase as determined by electron diffraction, 1374–8
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
MOLYBDATE
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI–)], 289–91
MOLYBDENOCENE
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
MOLYBDENUM
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)molybdenum(II)], 229–34
Molybdenum(VI) complexes from diols and aminoalcohols: the occurrence of molybdenum dioxide and dimolybdenum tri– and pentoxide core structures, 248–52
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of $[MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2–)]$ (M = Mo or W; n = 1–3), 440–6
Crystal structures of fac–[bis(2–diphenylphosphinoethyl)phenylphosphine–PP'P'']tricarbonylchromium(0) and –molybdenum(0), 447–53
Synthesis and crystal structure of hydrido(tetrahydroborato)tetrakis(trimethylphosphine)molybdenum(II), 467–70
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8

MOLYBDENUM(contd)
Consecutive substitution in, and reduction of, η–allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
Preparation and properties of 1–adamantoxides, 2–adamantoxides, and 1–adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1–adamantoxo)dimethylaminemolybdenum(IV), 901–10
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Intramolecular rearrangement in η–allyl complexes of molybdenum(II) containing unidentate amine ligands, 1904–9
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Crystal and molecular structure of molybdenum tetrachloride oxide by neutron and x–ray diffraction, 2006–9
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
MONOCATION
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
MONOXIDE
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
MORPHOLINE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal and molecular structure of dimorpholinotetrasulfane, 632–3
MORPHOLINOTETRASELANE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
MORPHOLINOTETRASULFANE
Crystal and molecular structure of dimorpholinotetrasulfane, 632–3
MORPHOLINOTRISELANE
Crystal and molecular structures of dimorpholinotri– and –diselane 628–31
NAPHTHALENE
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
NAPHTHYLMETHYL
Crystal and molecular structure of $SnMePh[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]Br$ and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides $SnRR'[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]X$ and $SnRR'[CH_2C_6H_4(CH_2NMe_2\text{–}2)]X$, 1352–8
NAPHTHYLMETHYLAMINE
Crystal and molecular structure of $SnMePh[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]Br$ and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides $SnRR'[C_{10}H_5(OMe\text{–}5)(CH_2NMe_2\text{–}8)]X$ and $SnRR'[CH_2C_6H_4(CH_2NMe_2\text{–}2)]X$, 1352–8
NEOPENTYLCOBALAMIN
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
NEOPLASM
Interaction of cis–diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
NICKEL
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Encircling of metal ions by tetraaza macrocycles. Enthalpies of formation of high– and low–spin nickel(II) complexes of 14–membered ligands, 134–6
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
Synthesis and fluxional character of complexes of the type $[M_2(cp)_2(CO)_3(CNR)]$ (M = Fe or Ru, cp = $\eta\text{–}C_5H_5$), 503–10
Reactions of 1,1,1–tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
The N–M–N bond angle in the chelate ring of ethylenediamine. The crystal structure of tetraaqua(ethylenediamine)nickel(II) nitrate, 654–8
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Bonding properties of trinuclear metal carbonyls, 1005–11
Separation of a nickel(II)–rubeanic acid complex prepared on interlamellar surfaces of molybdenum trioxide, 1029–31
Thermochemistry of metal complexes with the rigid ligand 1,3,5–cis,cis–triaminocyclohexane, 1055–9
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
Enthalpic and entropic contributions in the reactions of hydrogen,

NICKEL(contd)
copper(II), and nickel(II) ions with the macrocycle 1,5,9,13–tetraazacyclohexadecane, 1722–5
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
Bivalent metal complexes of 1,11–diamino–3,6,9–trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
NIOBIUM
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Mono– and bis–η–cyclopentadienyl derivatives of niobium and tantalum: improved synthetic routes via trialkyl(cyclopentadienyl)tin reagents, 2155–61
NITRATE
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
NITRATO
Potassium hexanitratocobaltate(III), 314–16
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
NITRATOCOBALTATE
Potassium hexanitratocobaltate(III), 314–16
NITRATOIRIDATE
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
NITRIC
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
NITRIDE
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
NITRIDO
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido–bridged complexes of osmium and ruthenium, 2410–14
NITRIDOSULFONATE
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
NITRILOTRIACETATE
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
NITRO
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5–nitrosalicylate ion system, 1124–8
NITROBENZOYLHYDRAZIDO
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2–p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
NITROGEN
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
NITROPHENANTHROLINE
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
NITROSALICYLATE
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5–nitrosalicylate ion system, 1124–8

NITROSOANILINE
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N–alkyl–N–nitrosoanilines, 2282–7
NITROSOHYDROXYLAMIDO
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
NITROSOHYDROXYLAMIDOALUMINUM
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
NITROSOHYDROXYLAMINATE
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
NITROSOHYDROXYLAMINATO
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
NITROSONIUM
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)](3Os–Os); preparation and crystal structure, 716–20
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
Solution calorimetry of nitrosonium salts, 2415–17
NITROSYL
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
Solution calorimetry of nitrosonium salts, 2415–17
NITROUS
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
NMR
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Complexes of rhodium and iridium with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11–tetramethyl–1,4,8,11–tetraazacyclotetradecane)nickel(II) and –cobalt(II) ions towards associative solvent exchange, 574–8
Studies of lanthanide(III) pyridine–2,6–dicarboxylate complexes in aqueous solution. Part 1. Structures and proton nuclear magnetic resonance spectra, 597–602
Multinuclear magnetic resonance studies. Part 4. Tetraalkyldiphosphines with bulky substituents, 638–44
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu\text{–}SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'–bi(nido–decaboranyl) and 2,6'–bi(nido–decaboranyl), 790–6
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5\text{–}C_5Me_4Et)(\eta^5\text{–}C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
Studies of phosphazenes. Part 10. Spirocyclic derivatives of cyclotriphosphazatrienes, 840–4
Preparation and carbon–13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17
The oxidative addition of allylic halides to bis(cycloocta–1,5–diene)platinum; dynamic behavior of σ– and 1–3–η–allyl(cycloocta–1,5–diene)platinum complexes, 1200–7
Ligand substitution reactions of neutral and cationic allyl(cycloocta–1,5–diene)platinum complexes, 1208–19
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Synthesis and structural studies of chromium, molybdenum, and

NMR(contd)
tungsten compounds containing cyclopentadien; '–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Crystal and molecular structure of SnMePh[$C_{10}H_5$(OMe–5)(CH_2NMe_2–8)]Br and proton nuclear magnetic resonance study of the puckering of the chelate ring in five–coordinate triorganotin halides SnRR'[$C_{10}H_5$(OMe–5)(CH_2NMe_2–8)]X and SnRR'[$CH_2C_6H_4(CH_2NMe_2$–2)]X, 1352–8
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Carbonylation of [PtX(Ph)(PR_3)$_2$]. New intermediates in the CO insertion sequence, 1434–8
Thallium–205 nuclear magnetic resonance spectra of thallium(I) alkoxides, 1439–42
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], [$Hg_2Me_2(S_2C_6H_{10})$], 1471–4
Carbon–13 nuclear magnetic resonance studies on nickel carbonyl clusters, 1537–42
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Derivatives of acetamide containing difluorophosphino groups, 1768–70
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Structures of the complexes of dichlorocadmium with the aliphatic triamines bis(2–aminoethyl)amine, bis(3–aminopropyl)amine, and 2–aminoethyl(3–aminopropyl)amine: influence of aliphatic chain length on molecular association, 2090–4
Synthesis of platinum complexes of 2–methyl–2,4,6–tris(trifluoromethyl)pyran. X–ray crystal structure of (cycloocta–1,5–diene)[2–methyl–2,4,6–tris(trifluoromethyl)pyran]platinum, 2095–101
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Hydration of complexon complexes of lanthanide cations, 2151–4
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
Preparation, mechanism of formation, structure, and reactions of η–allyl complexes of ruthenium(II), 2418–24
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
Multinuclear magnetic resonance studies on μ–hydrido–μ–hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di–μ–hydridodihydridohexakis(trimethylphosphine–)diruthenium(II) and tri–μ–hydridohexakis(trimethylphosphine)–diruthenium(II) tetrafluoroborate, 2480–7
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
NONRIGIDITY
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
NORBORNANEDITHIOLATE
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], [$Hg_2Me_2(S_2C_6H_{10})$], 1471–4
NQR
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Chlorine–35 nuclear quadrupole resonance studies on some tin(IV) chloride adducts, 1164–8
Vibrational and chlorine–35 nuclear quadrupole resonance spectra of some complexes of ICl_4^- and $AuCl_4^-$. Part 1. Two crystal modifications of trichlorosulfonium tetrachloroiodate, [SCl_3][ICl_4], 2401–4
NUCLEAR
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
NUCLEOPHILE
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of [Rh(η^5–C_5Me_4Et)(η^5–$C_6H_6P(O)(OMe)_2$)][PF_6], 829–36
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
NUCLEOPHILIC
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
NUMBER
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
Hydration of complexon complexes of lanthanide cations, 2151–4
OCTABORATE
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
OCTAHEDRAL
Transition metal binding sites and ligand parameters, 2032–8
OLIGOMERIZATION
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
OPTICAL
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
ORBIT
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
ORDER
Theoretical CNDO molecular orbital analysis of metal–ligand bonding as a function of ligand basicity in some purely σ–bonding systems, 345–8
ORGANODIPHOSPHINE
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
ORGANOINDIUM
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
ORGANOSILANEDIYL
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of [(PtH(μ–$SiMe_2$)[$P(C_6H_{11})_3$])$_2$], 659–66
ORGANOSULFINATO
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal

ORGANOSULFINATO(contd)
structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
ORGANOTHIO
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
ORTHOSILICATE
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
OSMIUM
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)_3)_3]$, 99–104
Preparation and isomerization of dicarbonyldihalo[o–phenylenebis(dimethylarsine)]osmium complexes, 487–91
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
Preparation and carbon–13 nuclear magnetic resonance spectroscopic study of isonitrile substituted derivatives of dodecacarbonyltriosmium, 911–17
Joint x–ray and neutron diffraction refinement of the crystal and molecular structure of tri–μ–hydrido–μ–iodo–cyclo–tetrakis(tricarbonylosmium)(4 Os–Os), 1248–50
Protonation of pentakis(tert–butyl isocyanide)iron, 1789–90
Reactions of alkynes with $[Os_3(CO)_{11}(NCCH_3)]$: the crystal structures of $[Os_3(CO)_9(C_3H_2OH)H]$ and $[Os_3(CO)_9(C_3H_2OCH_3\cdot\cdot)H]$, 1852–7
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido–bridged complexes of osmium and ruthenium, 2410–14
OXACYCLOPENTYLIDENE
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of $[MnPt(\mu\text{–}I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]]$, 1625–9
OXALATE
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
The crystal structure of potassium trioxalatogermanate(IV) monohydrate, 2051–2
OXIDATIVE
The oxidative addition of allylic halides to bis(cycloocta–1,5–diene)platinum: dynamic behavior of σ– and 1–3–η–allyl(cycloocta–1,5–diene)platinum complexes, 1200–7
OXIDE
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
Crystal and molecular structure of 6,6'–bis(nido–decaboranyl) oxide, $(B_{10}H_{13})_2O$, 1251–2
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Fluoride crystal structures. Part 34. Antimony pentafluoride–iodine trifluoride dioxide, 1734–6
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Crystal and molecular structure of molybdenum tetrachloride oxide by neutron and x–ray diffraction, 2006–9
Antimony–121 Moessbauer investigations of tin–antimony oxides, 2241–5
Nitrato complexes of iridium. Part 2. $M_2[Ir(NO_3)_6]$ (M = K, Rb, or Cs), 2382–4
OXIDN
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Oxidation of hydrazine by halo complexes of iridium(IV) in acidic perchlorate solutions, 216–19
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(OR)_3)_4]$, 284–8
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
The cluster cation tetrahydrido–1,4–μ–hydroxotetrakis[tricarbonylosmium(I)(3Os–Os); preparation and crystal structure, 716–20
Kinetics of the silver(I)–catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
Kinetics of oxidation of aquairon(2+) by iodate in dilute perchloric acid solution, 797–803
Formation of lead–bearing ferrite in aqueous suspension by air oxidation, 825–8
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–R'SO_2X reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
The mechanism of oxidation of hexacyanoferrate(II) by nitrous acid 1487–8
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
Kinetics and mechanism of the oxidation of hydroxylamine by aquavanadium(V) ions in aqueous perchlorate media, 1532–6
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5\text{–}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
Electrochemical and chemical oxidation of $[BH_3(CN)]^-$ to $[BH_3(CN)\text{–}BH_2(CN)]^-$; electrochemical preparation of $[Fe(BH_3(CN))_2(NCCH_3)_4]$, 1917–20
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5

OXIDN(contd)
Solutions of hydrogen bromide in sulfolane, 2028–31
Transition metal binding sites and ligand parameters, 2032–8
Synthesis and physicochemical characteristics of alkane (or arene)–thio–, –sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Kinetics of the oxidation of 2–hydroxy–2–methylpropanoic acid by aquavanadium(V) ions in aqueous perchlorate media, 2143–6
Antimony–121 Moessbauer investigations of tin–antimony oxides, 2241–5
Crystal and molecular structure of bis(N,N'–dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium-(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium-(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
OXIME
Interaction of oximes with dichlorotris(triphenylphosphine)ruthenium(II), 174–9
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)$], 1992–2000
OXO
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
OXOANTIMONY
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
OXOBUTENEDIYL
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
OXORUTHENIUM
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane suostituted complexes, 2228–36
OXOTUNGSTATE
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
OXOVANADIUM
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
OXYFLUORIDE
Thermochemistry of fluorine compounds. Part 5. Di–μ–oxobis[trifluorooxoiodine(VII)], 869–70
OXYGEN
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper-(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
OXYGENATION
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
PAIR
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–$[Co(N(CH_2CH_2NH_2)_3)(NH_3)X]^{2+}$ ions (X = Cl^- or N_3^-) and the importance of ion pairs, 2255–8
PALLADA
Synthesis and chemistry of some palladacyclopentanes, 1633–7
PALLADACYCLOPENTANE
Synthesis and chemistry of some palladacyclopentanes, 1633–7
PALLADATE
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
PALLADATION
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N–alkyl–N–nitrosoanilines, 2282–7
PALLADIUM
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of $[Pd_2Cl_4((Me_3C)_2P-CH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$, 59–63
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Crystal structures of three palladium complexes with ortho–phenylenebis(methylphenylarsine) ligands, 1556–66
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu-(1-\sigma,1-2-\eta-C:CH-CH_2-CH_2-O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Selective cleavage of the two types of Pd–N bonds in di–μ–halobis[arylazooximatopalladium(II)], 1698–702
Effects of added alkali metal and alkylammonium bromides on the kinetics of reaction between the $[PdCl(Et_2N(CH_2)_2NH(CH_2)_2N-Et_2)]^+$ cation and bromide ion in aqueous solutions, 1809–11
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Transition metal–carbon bonds. Part 45. Attempts to cyclopalladate some aliphatic oximes, NN–dimethylhydrazones, ketazines, and oxime O–allyl ethers. Crystal structures of $[Pd_2(CH_2C(CH_3)_2C(=NOH)CH_3)_2Cl_2]$ and $Pd(CH_2C(=NNMe_2)C(CH_3)_3)(acac)$], 1992–2000
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2-p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
Some transition metal complexes derived from 1,9–bis(tritylthio)–3,7–diazanonane and the crystal structure of bis[(3,7–diazanonane–1,9–dithiolato–N,N',S,S'–nickel)–S,S']palladium(II), 2075–80
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N–alkyl–N–nitrosoanilines, 2282–7
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11

PALLADIUM(contd)
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$-1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C¹,S,S']chloropalladium(II), 2312–14
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
PARAMAGNETIC
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
PENTABORANE
Bonding studies of derivatives of pentaborane(9) through self–consistent charge calculations, 1236–42
PENTACARBONYL
The interaction of amines with iron pentacarbonyl, 1461–6
PENTAMETHYLCYCLOPENTADEINYL
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
PENTAMETHYLCYCLOPENTADIENYL
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
PENTAMETHYLENE
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
PENTANEDIONATE
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
PENTANEDIONATOCOPPER
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
PENTANEDIONATONICKEL
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
PENTANEDIONE
Kinetics and mechanisms of the reactions of vanadyl ion with β–diketones, 7–13
Kinetics and mechanism of the reactions of uranyl ion and β–diketones in methanol–water (9:1 v/v), 1502–10
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
PENTENYL
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
PENTENYLAMINE
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
PEPTIDE
Multiple forms of the copper(II)–carnosine complex, 590–6
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
PERCHLORATE
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Solution calorimetry of nitrosonium salts, 2415–17
PERHYDRATE
Thermal decomposition of some alkali metal oxalate monohydrates and monoperhydrates, 269–75
PERHYDROPYRIMIDINONE
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
PERIODATE
Application of the iodide–ion–selective electrode to a kinetic study of the periodate–iodide reaction, 1269–71
Kinetics of orthoperiodate dimerization studied by temperature–jump spectrophotometry, 2250–4
PEROXO
Intramolecular charge–transfer decomposition of the μ–peroxobis[–pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI–)], 289–91
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
The contribution of iron(II) reduction alongside proton–induced decomposition in the reactions of two μ–hydroxo–μ–peroxodicobalt(III) complexes, 2533–5
PEROXOCARBONATE
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
PEROXOCOBALT
Intramolecular charge–transfer decomposition of the μ–peroxobis[–pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
PEROXODICARBONATE
Alkali metal peroxocarbonates, $M_2[CO_3].nH_2O_2$, $M_2[C_2O_6]$, $M[HCO_4].nH_2O$, and $Li_2[CO_4].H_2O$, 2526–32
PEROXODIPHOSPHATE
Kinetics and mechanism of oxidations by peroxodiphosphate ions. Part 7. Role of trace metal ions, and catalysis by ethylenediaminetetraacetatocopper(II) in the oxidation of hexacyanoferrate(II) in acid perchlorate media, 1526–31
PEROXYDISULFATE
Kinetics of the silver(I)–catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
PHASE
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
PHENACYLDIBUTYLPHOSPHINE
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
PHENANTHROLINE
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
Ternary complexes of copper(II) with mixed acetylacetonate and nitrogen–containing ligands, 984–90
Proton nuclear magnetic resonance study of the self–association of 1,10–phenanthroline, 2,2'–bipyridyl, and their zinc(II) complexes 1079–86
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where

PHENANTHROLINE(contd)
high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,$N^{1'}$,O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
PHENANTHROLINEIRON
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
PHENOTHIAZINE
Cation radicals of phenothiazines. Part 4. Electron transfer between aquamanganese(III) and N–alkylphenothiazines, 484–6
PHENOXIDE
Crystal and molecular structure of an unsubstituted bis(phenoxo) derivative of copper(II), the [$(Cu(OPh)_2(en))_2$].2PhOH dimer, with a 'normal' magnetic moment at room temperature, 1419–24
PHENOXY
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
PHENOXYACETATO
Metal–phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)– and diaquabis(p–chlorophenoxyacetato)manganese(II), –cobalt(II), and –magnesium(II), 2462–6
PHENOXYACETATOMANGANESE
Metal–phenoxyalkanoic aid interactions. Part 2. Crystal and molecular structures of diaquabis(phenoxyacetato)– and diaquabis(p–chlorophenoxyacetato)manganese(II), –cobalt(II), and –magnesium(II), 2462–6
PHENYL
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Carbonylation of [$PtX(Ph)(PR_3)_2$]. New intermediates in the CO insertion sequence, 1434–8
Mass spectral investigations on benzeneseleninic acid, 1467–70
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
PHENYLACETYLENE
Synthesis, molecular structure, and dynamic behavior in solution of octakis(tert–butyl isocyanide)dicobalt, 80–6
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Alkyne complexes of platinum. Part 4. Stepwise formation of di– and triplatinum complexes with bridging alkyne ligands; crystal structure of cd–bis(μ–diphenylacetylene)–abef–tetrakis(triethylphosphine)triplatinum, 2182–90
PHENYLAZO
Selective cleavage of the two types of Pd–N bonds in di–μ–halobis[arylazooximatopalladium(II)], 1698–702
PHENYLAZOALDOXIME
Selective cleavage of the two types of Pd–N bonds in di–μ–halobis[arylazooximatopalladium(II)], 1698–702
PHENYLBORATE
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
PHENYLBUTANEDIONATE
Zirconium complexes with the trifunctional 3–cyanopentane–2,4–dionate ligand, 1265–8
PHENYLDIAZADIENE
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of [$RuCl_2(PPh_3)_3$] and [$RuH(Cl)(PPh_3)_3$] and disproportionation of a hydridochloro complex, 539–44
PHENYLDITHIADIAZOLE
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
PHENYLDITHIADIAZOLIUM
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
PHENYLDITHIOCARBAZATE
Synthesis and fluxional character of complexes of the type [$M_2(cp)_2(CO)_3(CNR)$] (M = Fe or Ru, cp = η–C_5H_5), 503–10
PHENYLENEBISDIMETHYLARSINE
Preparation and isomerization of dicarbonyldihalo[o–phenylenebis(dimethylarsine)]osmium complexes, 487–91
PHENYLENEBISMETHYLPHENYLPHOSPHINE
Crystal structures of meso–ortho–phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
PHENYLMERCURY
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
PHENYLPHOSPHINE
Interaction of oximes with dichlorotris(triphenylphosphine)ruthenium(II), 174–9
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of [$RuCl_2(PPh_3)_3$] and [$RuH(Cl)(PPh_3)_3$] and disproportionation of a hydridochloro complex, 539–44
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
PHENYLTELLURIUM
Bonding and structure of diphenyltellurium(IV) difluoride, 2306–8
PHENYLTHALLIUM
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
PHENYLTIN
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'–ethylenebis(salicylideneimine) studied by temperature–dependent Moessbauer spectroscopy, 1983–7
PHOSPHAFERROCENE
Phosphaferrocenes as phosphorus ligands. Crystal and molecular structure of tetracarbonyl(3,4–dimethylphosphaferrocene–P)iron 2522–5
PHOSPHAZENE
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
PHOSPHINE
Dynamic properties and solution structures of the clusters [$Fe_3(CO)_9X_2$] (X = S, Se, Te, or NMe) and their derivatives, 46–51
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of [$Pd_2Cl_4((Me_3C)_2P–CH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$], 59–63
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Interaction of oximes with dichlorotris(triphenylphosphine)ruthenium(II), 174–9
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex [$Ir^{III}(\eta^3–B_3H_7)(CO)H(PPh_3)_2$], 196–200
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Insertion of platinum into an ortho–carboranyl boron–hydrogen bond. The crystal and molecular structure of the diphenyl(ortho–carboranyl)phosphine complex [$PtCl(Ph_2PC_2B_{10}H_{10})(Ph_2PC_2B_{10}H_{11})$], 317–20
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44

PHOSPHINE(contd)
The trans influence and trans effect of the arsine group. The x-ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C¹](hexafluoroacetylacetonato)platinum(II), 349–54
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of [$MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2$-)] (M = Mo or W; n = 1–3), 440–6
Crystal structures of fac–[bis(2–diphenylphosphinoethyl)phenylphosphine–PP'P'']tricarbonylchromium(0) and –molybdenum(0), 447–53
Synthesis and crystal structure of hydrido(tetrahydroborato)tetrakis(trimethylphosphine)molybdenum(II), 467–70
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of [$RuCl_2(PPh_3)_3$] and [RuH(Cl)(-$PPh_3)_3$] and disproportionation of a hydridochloro complex, 539–44
Consecutive substitution in, and reduction of, η–allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Reduction–oxidation properties of organotransition metal complexes. Part 8. Formation and reactivity of the radical cations $[Fe(CO)_3L_2]^+$, and the mechanism of the oxidative elimination reaction of $[Fe(CO)_3L_2]$ with halogens, 579–85
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
X–ray photoelectron spectra of some gold compounds, 767–70
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type $[Co(SiR_3)(CO)_nL_{4-n}]$, 923–7
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
Aryltriazenido complexes. Crystal and molecular structure of trans–carbonyl(1,3–di–p–tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structures of meso–ortho–phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
Selective cleavage of the two types of Pd–N bonds in di–μ–halobis[arylazooximatopalladium(II)], 1698–702
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) $[BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) $[BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5–C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2–p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
Alkyl and acyl derivatives of nickel(II) containing tertiary phosphine ligands, 2108–16
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
Alkyne complexes of platinum. Part 4. Stepwise formation of di– and triplatinum complexes with bridging alkyne ligands; crystal structure of cd–bis(μ–diphenylacetylene)–abef–tetrakis(triethylphosphine)triplatinum, 2182–90
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Preparation, mechanism of formation, structure, and reactions of η–allyl complexes of ruthenium(II), 2418–24
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
Multinuclear magnetic resonance studies on μ–hydrido–μ–hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di–μ–hydridodihydridohexakis(trimethylphosphine-)diruthenium(II) and tri–μ–hydridohexakis(trimethylphosphine)-diruthenium(II) tetrafluoroborate, 2480–7
PHOSPHINITE
Studies in six–coordination of the lanthanides with bidentate ligands. The crystal and molecular structures of tris(dicyclohexyldithiophosphinato)dysprosium(III) and tris(dicyclohexyldithiophosphinato)lutetium(III), 1300–3
PHOSPHINOAMINE
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Gas–phase molecular structure of bis(difluorophosphino)amine, determined by electron diffraction, 954–7
PHOSPHINOTHIOYLMETHANE
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
PHOSPHINYL
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
PHOSPHITE
Hydrido–nitrosyl clusters $[M_3(CO)_{10}H(NO)]$ (M = Ru or Os) and the molecular and crystal structure of $[Ru_3(CO)_7H(NO)(P(OMe)-_3)_3]$, 99–104
Electrochemical and metathetical preparations of isomers of bis(cyanotrihydroborato)tetrakis(trialkyl phosphite)iron(II) complexes, $[Fe(BH_3(CN))_2(P(O[illegible])_4]$, 284–8
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Metal carbonyl chemistry. Part 29. Preparation and properties of

PHOSPHITE(contd)
the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives; crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5–C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Kinetics and mechanism of diene exchange at six–coordinate chromium, 2237–40
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
PHOSPHONATE
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of $[(Ru(CO)_2(\eta^5–C_5H_2))_2]$ with phosphite and phosphine ligands, 1845–51
PHOSPHONIUM
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Crystal structures of meso–ortho–phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
PHOSPHORANE
Preparation and nuclear magnetic resonance spectra of aminodifluorophosphorane, 2049–50
PHOSPHORUS
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
PHOSPHORYL
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
PHOSPHORYLCYCLOHEXADIENYL
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5–C_5Me_4Et)(\eta^5–C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
PHOTOCHEM
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
PHOTOELEC
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2–N{:}C(–S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
PHOTOELECTRON
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
X–ray photoelectron spectra of some gold compounds, 767–70
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
PHOTOLYSIS
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Photochemistry of dicarbonylcyclopentadienylcobalt in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tricarbonylcyclopentadienylcobalt and carbonylcyclopentadienyl(dinitrogen-)cobalt complexes, 167–73
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Metal carbonyl photochemistry. Part 1. Photolysis of the Group 6 hexacarbonyls in hydrocarbon glasses; the species $M(CO)_5$, $M(CO)_4$, $M(CO)_3$, and $[M(CO)_5(OH)_2]$, 1646–50
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Photochemistry of chloro–, bromo–, and iodo–pentacarbonylmanganese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for tetracarbonylhalomanganese species with a C_{2v} trigonal–bipyramidal structure, 1803–8
Photochemistry of pentacarbonylmethylmanganese and acetylpentacarbonylmangaese in frozen gas matrixes at 12 K. Infrared spectroscopic evidence for theformation of methyl– and acetyltetracarbonylmanganese species, 2323–32
PHTHALOCYANINATE
Structure of phthalocyaninatocobalt(II) at 4.3 K: a neutron diffraction study, 1688–92
PHTHALOCYANINATOCOBALT
Structure of phthalocyaninatocobalt(II) at 4.3 K: a neutron diffraction study, 1688–92
PHTHALOCYANINATOIRON
Bis adducts of phthalocyaninatoiron(II) with Group 6A axial donor atoms. Crystal and molecular structure of sulfur–bonded bis(dimethyl sulfoxide)phthalocyaninatoiron(II)–dimethyl sulfoxide (1/2), 1965–9
PHTHALOCYANINATOMANGANESE
Manganese 3d and 4s electron–density distribution in phthalocyaninatomanganese(II), 1515–25
PHTHALOCYANINE
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Manganese 3d and 4s electron–density distribution in phthalocyaninatomanganese(II), 1515–25
Crystal structure of vanadyl phthalocyanine, phase II, 2300–2
PHTHALOCYANINETETRASULFONATOCOBALT
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
PICOLINATE
Studies of lanthanide(III) dipicolinate complexes in aqueous solution. Part 2. Hydration, 813–16
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
PIPERIDINE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3

PIPERIDINOTETRASELANE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal structure of γ–monoclinic selenium, 624–7
PIVALOYLMETHYLDIBUTYLPHOSPHINE
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
PLASMA
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
PLATINABORANE
Molecular orbital studies on carbametallaboranes. Part 3. Tricapped trigonal prismatic carbaplatinaborane and related polyhedral molecules, 1674–81
PLATINATE
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
PLATINATION
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N–alkyl–N–nitrosoanilines, 2282–7
PLATINUM
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Formation of large chelate rings and cyclometalated complexes from $(Me_3C)_2PCH_2CH_2CHMeCH_2CH_2P(CMe_3)_2$ and platinum and palladium chlorides. Crystal structure of $[Pd_2Cl_4((Me_3C)_2P-CH_2CH_2CHMeCH_2CH_2P(CMe_3)_2]$, 59–63
Interaction of allylic alcohols with halo–bridged platinum(II) complexes $[Pt_2X_4(PR_3)_2]$ (X = Cl or Br) and $[NBu^n_4]_2[Pt_2Cl_6]$: crystal structure of $[PtCl_2(PMe_2Ph)(CH_2{:}CHCH_2OH)]$, 64–9
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Insertion of platinum into an ortho–carboranyl boron–hydrogen bond. The crystal and molecular structure of the diphenyl(ortho–carboranyl)phosphine complex $[PtCl(Ph_2PC_2B_{10}H_{10})(Ph_2PC_2B_{10}H_{11})]$, 317–20
The trans influence and trans effect of the arsine group. The x–ray structures of dichloro[diphenyl(o–vinylphenyl)arsine]platinum(II) and [1–(o–diphenylarsinophenyl)–2–methoxyethyl–As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu\text{–}SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
Carbonyl insertion at $[PtX(Ph)(CO)L]$: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Mono– and binuclear anionic pentafluorophenyl complexes of palladium(II) and platinum(II), 888–94
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
The cyanobis(1,10–phenanthroline)platinum(II) complex in aqueous solution and as the crystalline nitrate. Nuclear magnetic resonance measurements and crystal structure determination, 973–8
Complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
The oxidative addition of allylic halides to bis(cycloocta–1,5–diene)platinum; dynamic behavior of σ– and 1–3–η–allyl(cycloocta–1,5–diene)platinum complexes, 1200–7
Ligand substitution reactions of neutral and cationic allyl(cycloocta–1,5–diene)platinum complexes, 1208–19
The synthesis, reactions, and dynamic behavior of allyl(cyclopentadienyl)platinum complexes, 1220–7
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Carbonylation of $[PtX(Ph)(PR_3)_2]$. New intermediates in the CO insertion sequence, 1434–8
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ–tolylidyne groups; crystal structure of $[PtW(\mu\text{–}C\text{–}C_6H_4Me\text{–}p)(CO)_2(PMe_2Ph)_2(\eta\text{–}C_5H_5)]$, 1609–14
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of $[Pt_2W(\mu\text{–}C(OMe)Ph)(CO)_4[P(CMe_3)_2Me]_2]$, 1615–24
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 5. Synthesis and crystal structure of $[MnPt(\mu\text{–}I)(COCH_2CH_2CH_2)(CO)_4[P(CMe_3)_2Me]]$, 1625–9
Interaction of cis–diamminediaquaplatinum(II) with adenosylcobalamin and alkylcobalamins, 1668–73
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
Preparation of the complexes trans–$[PtX_2(CO)L]$ and their isomerization to cis isomers, 1988–91
Deprotonation reactions by transition metal peroxocomplexes. Synthesis of aroylhydrazido– and aroylhydroxylamido–complexes of palladium and platinum and the crystal and molecular structures of $[Pt(PPh_3)_2(NHNC(O)C_6H_4NO_2\text{–}p)]$ and $[Pt(PPh_3)_2(ONC(O)C_6H_5)]$, 2060–7
Synthesis of platinum complexes of 2–methyl–2,4,6–tris(trifluoromethyl)pyran. X–ray crystal structure of (cycloocta–1,5–diene)[2–methyl–2,4,6–tris(trifluoromethyl)pyran]platinum, 2095–101
Alkyne complexes of platinum. Part 3. The synthesis and crystal structure of bis(diphenylacetylene)platinum, and studies on related compounds, 2170–81
Alkyne complexes of platinum. Part 4. Stepwise formation of di– and triplatinum complexes with bridging alkyne ligands; crystal structure of cd–bis(μ–diphenylacetylene)–abef–tetrakis(triethylphosphine)triplatinum, 2182–90
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes $[[Pt(en)_2][Pt(en)_2X_2)]_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane–

PLATINUM(contd)
1,2-diamine and pn = propane 1,2-diamine), 2498–502
POINT
Formation of lead-bearing ferrite in aqueous suspension by air oxidation, 825–8
POLARIZABILITY
Transition metal binding sites and ligand parameters, 2032–8
POLARIZATION
Circularly polarized luminescence studies of the optical activity induced in the europium(III) chelate of 4,4,4-trifluoro-1-(2-thienyl)butane-1,3-dionate through adduct formation with cinchona alkaloids, 2369–73
POLARON
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
POLEMIC
Soft-sphere ionic radii for alkali and halogenide ions, 645
Cobalt(II)–ether bonds. Reply to comments, 2318
Cobalt(II)–ether bonds. Comments, 2318
POLYAMIDOAMINE
Macro-inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
POLYAMINE
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
POLYETHER
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
POLYHALIDE
Iodine-127 Moessbauer spectra of diiodine undecafluorodiantimonate(1-) and some polyhalide anions, 1060–5
Chlorine-containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
POLYMER
Separation of a nickel(II)–rubeanic acid complex prepared on interlamellar surfaces of molybdenum trioxide, 1029–31
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'-ethylenebis(salicylideneimine) studied by temperature-dependent Moessbauer spectroscopy, 1983–7
POLYMETHYLPHENYLSILOXANE
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
POLYMN
Silicate species in solution. Part 1. Experimental observations, 393–8
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
POLYOXYPHENYLENE
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
POLYSTYRENE
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
POLYSULFUR
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
PORPHYRIN
Concentration- and solvent-dependent electron spin resonance signals and dimer formation of high-spin iron(III) porphyrins, 526–34
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
Synthesis and physicochemical characteristics of alkane (or arene)-thio-,-sulfinato-, and -sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20-tetraphenylporphyrinato)indium(III), 2081–9
POTASSIUM
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
Solid state vibrational spectroscopy. Part 7. A vibrational spectroscopic study of the thermal decompositions of sodium and potassium thiosulfate, 245–7
Potassium hexanitratocobaltate(III), 314–16
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]$-$Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10-tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
Crystal and molecular structure of the potassium salt of polymeric manganese(III) malonate, $K[Mn(C_3H_2O_4)_2(CH_3OH)]$, 996–8
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
Alkali metal heptafluorodiarsenates(III): their preparation and the crystal structure of the potassium salt, 1630–2
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine-N,O-disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
POTENTIAL
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans-substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner-sphere versus outer-sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis- and trans-ruthenium(II) amine complexes, 128–33
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10-tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio- and diseleno-ethers, 1175–81
Determination of the separate barrier energies for six-membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon-13 nuclear magnetic resonance study, 1582–92
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
Transition metal binding sites and ligand parameters, 2032–8
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
PPTN
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
PRASEODYMIUM
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
PRESSURE
Vibrational spectroscopy at very high pressures. Part 26. An infrared study of the metastable phases of $Ca[CO_3]$, 1482–6
PROPANEDIAMINE
Electronic and resonance–Raman spectra of the linear-chain mixed valence platinum complexes $([Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane-1,2-diamine and pn = propane 1,2-diamine), 2498–502
PROPENE
Organosilicon chemistry. Part 24. Homogeneous rhodium-catalyzed hydrosilation of alkenes and alkynes: the role of oxygen

PROPENE(contd)
or hydroperoxides, 308–13
PROPOXY
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
PROPYL
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
PROPYLTIN
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
PROPYNE
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
PROTON
Electron relaxation rates of lanthanide aqua cations, 2147–50
PROTONATION
Intramolecular charge–transfer decomposition of the μ–peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Polar and steric effects in the stability of silver complexes of primary amines, 416–18
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Nickel complexes of the methyl esters of dithiocarbazic and N–substituted dithiocarbazic acids, 499–502
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13–tetraazacyclohexadecane, 1722–5
Protonation of pentakis(tert–butyl isocyanide)iron, 1789–90
Solutions of hydrogen bromide in sulfolane, 2028–31
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
Complexes of organoaluminum compounds. Part 11. Nitric oxide complexes of trimethyl–aluminum and –gallium and the crystal and molecular structure of ([N–methyl–N–(nitroso–O')hydroxylamido–O]dimethylaluminum–O')trimethylaluminum, 2493–7
PSEUDOWOLLASTONITE
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
PYRAN
Synthesis of platinum complexes of 2–methyl–2,4,6–tris(trifluoromethyl)pyran. X–ray crystal structure of (cycloocta–1,5–diene)[2–methyl–2,4,6–tris(trifluoromethyl)pyran]platinum, 2095–101
PYRANYL
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
PYRAZINE
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
PYRIDINE
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3-B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Coordination compounds of indium. Part 35. The direct electrochemical synthesis of adducts of indium(III) halides, 1161–3
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Intramolecular rearrangement in η–allyl complexes of molybdenum(II) containing unidentate amine ligands, 1904–9
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
PYRIDINECOBALOXIME
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
PYRIDINECOBALT
Kinetics of solvolysis of the trans–dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
PYRIDINEDICARBOXYLATE
Fluoride crystal structures. Part 33. Tetraethylammonium μ–fluorobis[oxoperoxo(pyridine–2,6–dicarboxylato)molybdate(VI)], 289–91
Properties and structural characterization of copper(II) mixed complexes with 2,2'–bipyridyl and iminodiacetate or pyridine–2,6–dicarboxylate, 369–75
Studies of lanthanide(III) pyridine–2,6–dicarboxylate complexes in aqueous solution. Part 1. Structures and proton nuclear magnetic resonance spectra, 597–602
PYRIDINESULFONATE
Electronic properties and crystal structures of the copper–doped zinc(II) bis(pyridine–3–sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
PYRIDINYLMETHYLIDENEAMINE
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
PYRIDYLAMINE
Crystal structure of bis(2–aminoethyl)amine(di–2–pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)–doped system, 1105–11
PYRIDYLHYDRAZONE
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 1. 2,6–Diacetylpyridine bis(2'–pyridylhydrazone) 459–66
PYRIDYLIMIDAZOLINE
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
PYRIDYLPHOSPHINE
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
PYRROLE
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8

PYRROLIDINE
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
PYRROLIDINEFERRATE
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
PYRROLIDINYLDITHIOCARBAMATE
Stereochemistry of [M(bidentate ligand)$_2$(unidentate ligand)]. Crystal structure of iodobis(pyrrolidinyldithiocarbamato)iron(III)–iodine (2/1), 1921–7
PYRROLYLMETHYLIDENEAMINE
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
QUATERNARY
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
QUINOLINE
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Hydration, hydrolysis, and dissociation of a nickel(II) bromide–quinoline complex, 2046–8
QUINOLINECARBALDIMINE
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
QUINOLYLMETHYLPHOSPHINE
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of [PdCl$_2$(mqp)], 1974–82
QUINQUEDENTATE
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10–phenanthroline. Crystal and molecular structure of a complex with pentagonal–pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
RADICAL
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
One–electron reduction of diimidosulfur compounds, S(NR)$_2$, and some complexes of Group 6A metal carbonyl derivatives containing S(NR)$_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–R'SO$_2$X reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
RADIOLYSIS
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
Silver(I) imidazole perchlorate. An (Ag$^+$)$_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7
RADIOLYTIC
Comparative study of the electrochemical and pulse–radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11–tetraazacyclotetradecane, 1243–7
RADIUS
Soft–sphere ionic radii for alkali and halogenide ions, 645
RAMAN
Determination of the molecular structure and absolute configuration of (R)–tris(trifluoroacetato)antimony(III), 105–8
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, K$_3$[CH(SO$_3$)$_3$].H$_2$O, 149–55
Vibrational spectra and crystal and molecular structure of trans,cis–S–methyl dithiocarbazate, a second conformer, 423–5
On the vibrational assignment and bond angles in chromyl fluoride 535–8
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, K$_3$[N(SO$_3$)$_2$].H$_2$O, 1091–7
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, K$_2$[O$_3$SONHSO$_3$]. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, K$_3$[O$_3$SON(SO$_3$)$_2$].1.5H$_2$O, 2199–207
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
Vibrational and chlorine–35 nuclear quadrupole resonance spectra of some complexes of ICl_4^- and $AuCl_4^-$. Part 1. Two crystal modifications of trichlorosulfonium tetrachloroiodate, [SCl$_3$][ICl$_4$], 2401–4
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes [[Pt(en)$_2$][Pt(en)$_2$X$_2$]]$_3$[CuX$_4$]$_4$ [X = Cl or Br] and [Pt(pn)$_2$][Pt(pn)$_2$Br$_2$][Cu$_3$Br$_5$]$_2$ (en = ethane–1,2–diamine and pn = propane 1,2–diamine), 2498–502
Alkali metal peroxocarbonates, M$_2$[CO$_3$].nH$_2$O$_2$, M$_2$[C$_2$O$_6$], M[HCO$_4$].nH$_2$O, and Li$_2$[CO$_4$].H$_2$O, 2526–32
RANKINITE
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
RAY
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
A study of copper compounds by x–ray absorption spectroscopy, 837–9
REACTION
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Trifluoroacetate as a bridging ligand for antimony(V): crystal and molecular structures of μ–fluoro–μ–trifluoroacetato–bis[tetrafluoroantimony(V)] and of μ–oxo–di–μ–trifluoroacetato–bis[trifluoroantimony(V)], 109–14
Reactions of the octahydrotriborate(1–) anion, [B$_3$H$_8$]$^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex [Ir^{III}(η^3–B$_3$H$_7$)(CO)H(PPh$_3$)$_2$], 196–200
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Reactions of co–ordinated ligands. Part 21. Reaction of 3,3,3–trifluoroprop–1–yne with methyl– and benzyldicarbonyl(η–cyclopentadienyl)iron and of hexafluorobut–2–yne with tricarbonyl(1–3–η–2–methylallyl)cobalt. Crystal structure of [1–5–η–exo–1–acetyl–2,4,6–tris(trifluoromethyl)cyclohexadienyl](η–cyclopentadienyl)iron, 292–8
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines P(CMe$_3$)$_2$(CH$_2$COR) (R = Ph or CMe$_3$), 299–301
Metal carbonyl chemistry. Part 27. Formation of [Co$_3$(CCl)(CO)$_9$] by reaction of the carbene precursor Hg(CCl$_3$)Ph with octacarbonyldicobalt, 403–6
Reaction of 1–3–(η–acryloyl)tricarbonylferrate with acyl halides giving 1:1 adducts, the 2–acyloxy–1,1–dicarbonyl–1–haloferracyclopent–2–en–5–onates, 429–34
Protonation of isonitriles ligating molybdenum(0) and tungsten(0)

REACTION(contd)
at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal structure of γ–monoclinic selenium, 624–7
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of [Rh(η^5–C_5Me_4Et)(η^5–$C_6H_6P(O)(OMe)_2$)][PF_6], 829–36
Studies of phosphazenes. Part 10. Spirocyclic derivatives of cyclotriphosphazatrienes, 840–4
Optimized synthesis and mechanism of formation of 2,4–dichloro–1,3–bis(dichlorophosphoryl)–2,4–dioxocyclodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in [$ReCl_3(RNO)(OPPh_3)$], 1145–9
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Ligand substitution reactions of neutral and cationic allyl(cycloocta–1,5–diene)platinum complexes, 1208–19
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Application of the iodide–ion–selective electrode to a kinetic study of the periodate–iodide reaction, 1269–71
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of [$Pt_2W(\mu$–C(OMe)Ph)$(CO)_6$[$P(CMe_3)_2Me$]$_2$], 1615–24
Synthesis and chemistry of some palladacyclopentanes, 1633–7
Derivatives of acetamide containing difluorophosphino groups, 1768–70
Low valent metal isocyanide complexes. 2. Oxidative reactions of pentakis(tert–butyl isocyanide)iron with alkyl, allyl, benzyl, fluoroalkyl, pentafluorophenyl halides, and [Me_3O][BF_4] + PhC≡CPh. Isocyanide insertion reactions. Structure of Fe($CNCMe_3$)$_3$(1–4–η–C(:$NCMe_3$):C(Ph)C(Ph):C(:$NCMe_3$)), 1779–88
Reactivity of new azido complexes of titanium and vanadium, 1800–2
Reactions of alkynes with [$Os_3(CO)_{11}(NCCH_3)$]: the crystal structures of [$Os_3(CO)_9(C_3H_2OH)H$] and [$Os_3(CO)_9(C_3H_2OCH_3)H$], 1852–7
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of [NBu_4][($Zn(S_2CNMe_2)_2)_2(\mu$–OCOMe)], 1939–44
Reactions of trans–[chlorohydridobis(triphenylphosphine)platinum]with α–hydroxy acetylenes, 1958–60
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
Preparation of the sixteen–atom ring chelates trans–[$M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2$], M = Pd or Pt: crystal structure of trans–[$Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2$], 2309–11
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
REACTIVITY
Transition metal binding sites and ligand parameters, 2032–8
REARRANGEMENT
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Stereochemically nonrigid silanes, germanes, and stannanes. Part 6. Poly(cyclopentadienyl)silanes. A comparison of thermodynamic parameters derived from approximate methods with those obtained using full lineshape analysis of carbon–13 nuclear magnetic resonance data, 224–8
RED
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
REDISTRIBUTION
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
REDN
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis– and trans–ruthenium(II) amine complexes, 128–33
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Consecutive substitution in, and reduction of, η–allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Pulse and γ–radiolysis of nickel(II) nitrilotriacetate in aqueous solutions, 675–80
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
Thermochemistry of fluorine compounds. Part 5. Di–μ–oxobis[trifluorooxoiodine(VII)], 869–70
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
Structure and reactivities of six–coordinate first row transition metal nitrosyl complexes, 1359–67
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic

REDN(contd)
ligands. Crystal and molecular structure of a compound where high–spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
Electroanalytical investigation on ligand–disproportionation and –exchange equilibriums in nickel(II) and nickel(I) halide phosphine complexes in acetonitrile, 2288–93
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals •MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
REDOX
Intervalence transfer in outer–sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
Heterogeneous catalysis in solution. Part 18. The catalysis by carbons of oxidation–reduction reactions, 854–9
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
Electrochemical behavior of five coordinate nitrosyl cobalt complexes in an aprotic medium, 979–83
The (bis–2,6–[1–(2–imidazol–4–ylethylimino)ethyl]pyridine)copper-(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
RELAXATION
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
Electron relaxation rates of lanthanide aqua cations, 2147–50
Hydration of complexon complexes of lanthanide cations, 2151–4
REORIENTATION
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
REPULSIVE
The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67
RESOLN
Stereoselectivity in the ternary complexes copper(II)–N–benzyl–L–proline–D– or L–α–amino acids, 76–9
RESONANCE
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2–diaminoethane substituted complexes, 2228–36
RHENATE
Crystal structure of potassium heptacyanorhenate(III) dihydrate, 192–5
RHENIUM
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
Synthesis and crystal and molecular structure of bis(trimethylsilylmethylidyne)tetrakis(trimethylsilylmethyl)dirhenium (Re–Re), 1797–9
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium-(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium-(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
RHODANINE
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
RHODIUM
Mixed–metal carbido carbonyl clusters. Part 1. Synthesis and structural characterization of di–μ_3–acetonitrilecupriocarbidoennea–μ–carbonylhexacarbonyl–polyhedro–hexarhodium, $[Cu_2Rh_6(CO)_{15}(NCMe)_2].0.5MeOH$, 52–4
Tris(2–pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex–1–ene by rhodium complexes, 55–8
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3–B_3H_7)(CO)H(PPh_3)_2]$, 196–200
Complexes of rhodium and iridium with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 302–7
Organosilicon chemistry. Part 24. Homogeneous rhodium–catalyzed hydrosilation of alkenes and alkynes: the role of oxygen or hydroperoxides, 308–13
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
Reactions of the η^6–benzene(η^5–ethyltetramethylcyclopentadienyl)rhodium(III) cation and related species with nucleophiles; the crystal structure of $[Rh(\eta^5–C_5Me_4Et)(\eta^5–C_6H_6P(O)(OMe)_2)][PF_6]$, 829–36
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Pentamethylcyclopentadienylrhodium and –iridium complexes. Part 26. Dicationic η^5–aniline and η^6–anisole complexes, 1048–54
Rhodium(I) complexes of 8–methyl–, 8–ethyl–, and 8–isopropylquinolines and related 2–substituted derivatives, 1259–64
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5–C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
Olefin–acetylene metal complexes: olefin–hexafluorobut–2–yne complexes of rhodium(I), 1716–21
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Coordination chemistry of (8–methyl–2–quinolylmethyl)di–tert–butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of $[PdCl_2(mqp)]$, 1974–82
Transition metal–diene complexes. Part 3. Isomerization of methyl–substituted acyclic and cyclic 1,3– and 1,4–dienes coordinated to rhodium(I), 2053–9
Synthesis of platinum complexes of 2–methyl–2,4,6–tris(trifluoromethyl)pyran. X–ray crystal structure of (cycloocta–1,5–diene)[2–methyl–2,4,6–tris(trifluoromethyl)pyran]platinum, 2095–101
RIGID
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans–1 2–dimercaptocyclohexanebis[methylmercury(II)], $[Hg_2Me_2(S_2C_6H_{10})]$, 1471–4
RING
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7–η–8–endo–

RING(contd)
trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
The trans influence and trans effect of the arsine group. The x-ray structures of dichloro[diphenyl(o-vinylphenyl)arsine]platinum(II-) and [1-(o-diphenylarsinophenyl)-2-methoxyethyl-As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Optimized synthesis and mechanism of formation of 2,4-dichloro-1,3-bis(dichlorophosphoryl)-2,4-dioxocyciodiphosph(V)azane from phosphoryl chloride and ammonium chloride, 851–3
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans-bis[1,2-bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
Metallaborane chemistry. Part 11. Lower rotational barriers in seven-vertex than in twelve-vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo-1,1-($Et_3P)_2$-2,3-Me_2-1,2,3-$PtC_2B_4H_4$] and [closo-1,1-($Et_3P)_2$-1,2,4-$PtC_2B_4H_6$], 1186–99
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
ROTATION
Olefin–acetylene metal complexes: olefin–hexafluorobut-2-yne complexes of rhodium(I), 1716–21
ROTATIONAL
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
RUBEANATE
Separation of a nickel(II)–rubeanic acid complex prepared on interlamellar surfaces of molybdenum trioxide, 1029–31
RUBIDIUM
Electrochemical studies on alkali-metal complexes with the small macrocycle 1,4,7,10-tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
RUTHENIUM
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Tris(2-pyridyl)phosphine complexes of ruthenium(II) and rhodium(I). Hydroformylation of hex-1-ene by rhodium complexes, 55–8
Hydrido–nitrosyl clusters [$M_3(CO)_{10}H(NO)$] (M = Ru or Os) and the molecular and crystal structure of [$Ru_3(CO)_7H(NO)(P(OMe)_3)_3$], 99–104
Structural and mechanistic studies of coordination compounds. Part 24. Application of cyclic voltammetry to study the chelation effect on acid hydrolysis of some cis- and trans-ruthenium(II) amine complexes, 128–33
Interaction of oximes with dichlorotris(triphenylphosphine)ruthenium(II), 174–9
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 13. The chemistry of dicarbonyl(trimethylsilyl)(1–3;6–7-η-8-endo-trimethylsilylcyclooctatrienyl)ruthenium, a pentalene precursor, 235–9
Improved syntheses of the hexanuclear clusters [$Ru_6(CO)_{18}]^{2-}$, [$HRu_6(CO)_{18}]^-$, and $H_2Ru_6(CO)_{18}$. The x-ray analysis of [$HRu_6(CO)_{18}]^-$, a polynuclear carbonyl containing an interstitial hydrogen ligand, 383–9
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Nickel complexes of the methyl esters of dithiocarbazic and N-substituted dithiocarbazic acids, 499–502
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X-ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
Reactions of ruthenium triphenylphosphine complexes with diazadienes. Part 1. Reactions of [$RuCl_2(PPh_3)_3$] and [RuH(Cl)($PPh_3)_3$] and disproportionation of a hydridochloro complex, 539–44
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon-chelated carbonylruthenium complex with cyclic polyolefins, 545–51
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, [$Ru_2(C_8H_8SiMe_2CH_2CH_2SiMe_2)(CO)_5$] and [$Ru_2(C_8H_8SiMe_3)(SiMe_3)(CO)_4$], 559–64
Structural and mechanistic studies of coordination compounds. Part 25. Synthesis and characterization of some octahedral haloamine and -thioether complexes of ruthenium(II) and -(III), 756–62
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen-donor Lewis bases and x-ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10-phenanthroline)ruthenium(II), 804–9
Ruthenium-99 and europium-151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Ab-initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Oxygen-transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Reduction-oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x-ray crystal structure of [$(Fe(CO)_3[\eta^5$-$C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one-electron oxidant, 1710–15
Tris(methylene)hexakis(trimethylphosphine)diruthenium(III). Synthesis and structures of bis[bis(methylene)tetrakis(trimethylphosphine)ruthenium(III)]ruthenium(IV) [$BF_4]_2$, tris(hydroxo)hexakis(trimethylphosphine)diruthenium(II) [$BF_4]_2$, and tricarbonylbis(trimethylphosphine)ruthenium(0), 1771–8
Carbon-oxygen and carbon-hydrogen bond cleavage in the reaction of [$(Ru(CO)_2(\eta^5$-$C_5H_2))_2$] with phosphite and phosphine ligands, 1845–51
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
Resonance Raman spectra of the polynuclear complexes ruthenium red, ruthenium brown, and the related 1,2-diaminoethane substituted complexes, 2228–36
Studies on transition metal nitrido and oxo complexes. Part 6. Nitrido-bridged complexes of osmium and ruthenium, 2410–14
Preparation, mechanism of formation, structure, and reactions of η-allyl complexes of ruthenium(II), 2418–24
Multinuclear magnetic resonance studies on μ-hydrido-μ-hydroxohexakis(trimethylphosphine)diruthenium(I). Crystal structures of di-μ-hydridodihydridohexakis(trimethylphosphine-)diruthenium(II) and tri-μ-hydridohexakis(trimethylphosphine)-diruthenium(II) tetrafluoroborate, 2480–7
RUTHENOCENE
A new synthetic method for the preparation of cycloolefin ruthenium complexes, 1961–4
SAFETY
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Chemistry of polydentate ligands. Part 5. Complexes of 2,9-dihydrazino derivatives of 1,10-phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Reactions of alkali metal azides with some halophosphorus compounds, 1036–41
Preparation of some thionitrosyl-type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: [$M(S_2N_2H)_2$], [$M(S_2N_2H)(S_3N)$], and [$M(S_3N)_2$] (M = Co, Ni, Pd, or Pt), 1910–16
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
Transition metal–carbon bonds. Part 46. Cyclopalladation and cycloplatination of N-alkyl-N-nitrosoanilines, 2282–7
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo- and dialkylamidorhenium compounds. Structures of di-μ-methoxotetramethoxo-μ-oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)-LiCl-THF(1/1/2)], and trans-tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75

SALICYLALDEHYDE
Study of ligand isomeric complexes of N–furfurylsalicylaldimine, 2319–22
SALICYLATE
Mechanism of complex formation. Kinetics and equilibriums of the gallium(III)–5–nitrosalicylate ion system, 1124–8
SALICYLIDENEAMINE
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
SALICYLIDENEIMINE
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
SALICYLOYL
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
SALICYLOYLHYDRAZONE
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6–diacetylpyridine bis(salicyloylhydrazone), 1970–3
SALT
A study of the products obtained by crystallizing $[NH_4]_2[Pt(CN)_4]$-$Cl_{0.3}.3H_2O$ or $K_2[Pt(CN)_4]Cl_{0.3}.3H_2O$ from acidic chloride solutions, 360–2
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
The chlorotrimethylammonium and bromotrimethylammonium cations, 821–4
Crystal structures of hydrido–, fluoro–, and chlorotris(triethylphosphine)platinum(II) salts, 1737–42
Effects of added alkali metal and alkylammonium bromides on the kinetics of reaction between the $[PdCl(Et_2N(CH_2)_2NH(CH_2)_2N$-$Et_2)]^+$ cation and bromide ion in aqueous solutions, 1809–11
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
Solution calorimetry of nitrosonium salts, 2415–17
SANDWICH
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η–cyclohexatriene)(η–cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
SCALE
A structural model for Lewis acids and bases. An analysis of the structural chemistry of the acetate and trifluoroacetate ions, 1118–23
SCANDIUM
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3–tetramethylurea)scandium(III) ion and its N,N–dimethylacetamide analog, 699–704
SCF
Ab–initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
SCHIFF
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
Reaction of electrogenerated NN'–ethylenebis(salicylideneiminato)-cobaltate(I) with tert–butyl bromide and tert–butyl chloride, 1489–93
Reactions of amino acids coordinated to metal ions. Part 1. Investigation of the condensation of formaldehyde and metal–coordinated glycine, 1655–63
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
Kinetics of peroxodisulfate oxidation of low–spin iron(II) complexes in binary aqueous mixtures, 2442–6
SELECTIVE
Application of the iodide–ion–selective electrode to a kinetic study of the periodate–iodide reaction, 1269–71
SELENIDE
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
SELENINIC
Mass spectral investigations on benzeneseleninic acid, 1467–70
SELENINYL
Secondary bonding. Part 6. Distorted octahedral geometry in seleninyl dichloride–dioxane (1/1) and iodylbenzene, 115–20
SELENIUM
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal structure of γ–monoclinic selenium, 624–7
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
SELENO
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
SELENOETHER
Complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
SELENOMORPHOLINE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
Crystal and molecular structures of dimorpholinotri– and –diselane 628–31
SELENOPIPERIDINE
Synthesis of dimorpholinodi–, tri–, and –tetraselane, and dipiperidinotetraselane. Crystal and molecular structures of the two tetraselanes, 620–3
SETCHENOW
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
SIDEROPHORE
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
SILANE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 6. Poly(cyclopentadienyl)silanes. A comparison of thermodynamic parameters derived from approximate methods with those obtained using full lineshape analysis of carbon–13 nuclear magnetic resonance data, 224–8
Synthesis of bis–μ–diorganosilanediyl–af–dihydridobis(triorganophosphine)diplatinum complexes: crystal and molecular structure of $[(PtH(\mu\text{–}SiMe_2)[P(C_6H_{11})_3])_2]$, 659–66
SILICATE
Silicate species in solution. Part 1. Experimental observations, 393–8
Silicate species in solution. Part 2. The structure of polymeric species, 399–402
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Reactions of trimethylsilylated silicate anions in acidic medium.

SILICATE(contd)
Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
SILICON
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
SILOXANE
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
SILVER
Crystal and molecular structure of bis(tetrasulfur tetraimide)silver(-I) perchlorate sesquihydrate, 355–9
Polar and steric effects in the stability of silver complexes of primary amines, 416–18
Electron–gain and –loss centers in irradiated diimidazolesilver(I) nitrate, 709–11
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Kinetics of the silver(I)–catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Crystal structure of a natural and a partially silver–exchanged heulandite, 1511–14
Silver(I) imidazole perchlorate. An $(Ag^+)_6$ cluster and its radiolytically produced one–electron adduct studied by x–ray diffraction and electron spin resonance spectroscopy, 1682–7
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5\text{–}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
The synthesis, properties, and the crystal and molecular structures of five–coordinate copper(I) and silver(I) complexes of a quinquedentate macrocyclic ligand having an N_3S_2 donor set, 2020–7
SILYL
Crystal structures of two diruthenium carbonyl complexes derived from cyclooctatetraene, $[Ru_2(C_8H_8SiMe_2CH_2CH_2SiMe_2)(CO)_5]$ and $[Ru_2(C_8H_8SiMe_3)(SiMe_3)(CO)_4]$, 559–64
Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type $[Co(SiR_3)(CO)_nL_{4-n}]$, 923–7
Crystal and molecular structures of silyl isocyanate (at –135°C) and of germyl isocyanate (at –95°C), 1838–44
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
SILYLAMIDE
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
SILYLAMIDO
Preparation, properties, and crystal structures of the monochlorotris[bis(trimethylsilyl)amido] compounds of titanium, zirconium, and hafnium, 2010–15
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
Syntheses of tetrachlorooxorhenium(VI) and chlorotrioxorhenium(VII). Alkoxo– and dialkylamidorhenium compounds. Structures of di–μ–methoxotetramethoxo–μ–oxodioxodirhenium(VI), bis[lithium pentaisopropoxooxorhenate(VI)–LiCl–THF(1/1/2)], and trans–tetraphenoxobis(trimethylphosphine)rhenium(IV), 2467–75
SILYLATION
Organosilicon chemistry. Part 25. Catalysis of the reaction between alcohols and silanes by hydrido–, dinitrogen–, and ethyleneiron complexes, 705–8
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
SILYLETHANE
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 14. Reactions of a disilicon–chelated carbonylruthenium complex with cyclic polyolefins, 545–51
SILYLMETHYL
Synthesis and crystal structures of chloro(trimethylphosphine)tris(trimethylsilylmethyl)molybdenum(IV) and di–μ–chlorobis[bis(carbonyl)trimethylphosphine(1–2–η–trimethylsilylmethylcarbonyl)molybdenum(II)], 229–34
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals ·MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
SILYLMETHYLRHENIUM
Trirhenium(III) cluster alkyls. Synthesis of tertiary phosphine adducts; cleavage to rhenium–(III) and –(II) dimers; reactions with carbon monoxide, nitric oxide, and hydrogen chloride. X–ray structural determinations of hexamethylbis(diethylphenylphosphine)tri–μ–methyl–triangulo–trirhenium(III) and tri–μ–chloro(N–nitroso–N–trimethylsilylmethylhydroxylaminato)pentakis(trimethylsilylmethyl)–triangulo–trirhenium(III), 334–44
SITE
Transition metal binding sites and ligand parameters, 2032–8
SLURRY
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
SODIUM
Solid state vibrational spectroscopy. Part 7. A vibrational spectroscopic study of the thermal decompositions of sodium and potassium thiosulfate, 245–7
Silicate species in solution. Part 1. Experimental observations, 393–8
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
Crystal structures of complexes between alkali metal salts and cyclic polyethers. Part 11. Complexes formed between 2,3,5,6,8,9,11,12–octahydro–1,4,7,10,13–benzopentaoxacyclopentadecin (benzo–15–crown–5) and sodium perchlorate (1:1), sodium perchlorate (2:1), and sodium tetraphenylborate (2:1), 1066–75
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
SOLN
Thermodynamics of lanthanide elements. Part 1. Enthalpies of formation of some lanthanide tribromides, 70–5
Thermochemistry of dichlorobis(NN–dimethylacetamide)zinc(II), and dichloro(NN–dimethylacetamide)cadmium(II) and –mercury(II), 156–8
Silicate species in solution. Part 1. Experimental observations, 393–8
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Thermodynamics of lanthanide elements. Part 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium(3+) ion, 1076–8
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
SOLVATION
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Influence of solvation on the initial and transition states for anation reactions of transition metal complexes in mixed aqueous solvents 1494–501
SOLVENT
Concentration– and solvent–dependent electron spin resonance signals and dimer formation of high–spin iron(III) porphyrins, 526–34
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15

SOLVENT(contd)
A phosphorus–31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Hard ligands as donors to soft metals. Part 3. Cationic bis(solvent) complexes of palladium(II); cations for catalysis, 2246–9
SOLVOLYSIS
Kinetics of solvolysis of the trans–dichlorotetrapyridinecobalt(III) ion in water and in water + methanol, 2405–9
SOLY
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Initial state and transition state effects in the mercury(II)–catalyzed aquation of chlorotransition metal complexes in binary aqueous solvent mixtures, 607–15
Solubilities and Setchenow coefficients for bis(2,2'–bipyridyl)dicyanoiron(II) and dicyanobis(5–nitro–1,10–phenanthroline)iron(II) in aqueous salt solutions, 616–19
SPECTRA
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands $C(OR')R$ [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
On the vibrational assignment and bond angles in chromyl fluoride 535–8
X–ray photoelectron spectra of some gold compounds, 767–70
A study of copper compounds by x–ray absorption spectroscopy, 837–9
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Crystal structure and electronic properties of ammine[tris(2–aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
The interaction of amines with iron pentacarbonyl, 1461–6
Mass spectral investigations on benzeneseleninic acid, 1467–70
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Vibrational spectroscopy at very high pressures. Part 26. An infrared study of the metastable phases of $Ca[CO_3]$, 1482–6
Transition metal binding sites and ligand parameters, 2032–8
Malonato(ethylenediamine) complexes of chromium(III): the structure of di–μ–hydroxobis[(ethylenediamine)malonatochromium(III)], 2039–41
Hexaisothiocyanates of vanadium(II), 2042–3
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Formation of a chromium–bearing ferrite, $Cr_{0.42}Fe_{2.56}O_{4.00}$, in aqueous suspension by nitrate oxidation, 2125–8
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Mass spectrometry of compounds of the type $[Fe(CO)_2(\eta–C_5H_5)R]$ (R = alkyl), 2488–92
SPECTROMETRY
A new kind of metal incorporation in porphyrins during mass spectrometric analysis: cation exchange between lithium halide or transition metal halide surfaces and metalloporphyrins in field desorption, 1416–18
SPIN
Photoelectron spectroscopy study of the x–ray–induced decomposition of some gold(III) dithiocarbamates, 201–4
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Natural abundance nitrogen–15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans–1,2–diaminocyclohexane–N,N,N',N'–tetraacetate ion and 1,4,8,11–tetraazacyclotetradecane, 721–5
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400
Thallium–205 nuclear magnetic resonance spectra of thallium(I) alkoxides, 1439–42
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Nuclear magnetic resonance investigation of rotation about phosphorus(V)–nitrogen bonds in aminocyclodiphosph(V)azanes, 1858–62
Electron relaxation rates of lanthanide aqua cations, 2147–50
Hydration of complexon complexes of lanthanide cations, 2151–4
SPIROCYCLIC
Studies of phosphazenes. Part 10. Spirocyclic derivatives of cyclotriphosphazatrienes, 840–4
SPLITTING
Single crystal electron spin resonance studies of gadolinium trisilylamide and sodium gadolinium dipicolinate (pyridine–2,6–dicarboxylate), 2476–9
STABILITY
Kinetics and mechanisms of the reactions of vanadyl ion with β–diketones, 7–13
Stability and structure of transition metal complexes of azoles in aqueous solutions. Part 21. A comparison of the complex–forming capacity of 1,2–dimethylimidazole with that of other 1,3–diazoles, 24–8
Kinetics of the reactions of nickel(II) ion with dicarboxylic acids in dioxane–water, 41–5
Stereoselectivity in the ternary complexes copper(II)–N–benzyl–L–proline–D– or L–α–amino acids, 76–9
The electronic spectra of the mixed mercury dihalides. Part 1. Computational procedures for calculating spectra, for a new route to equilibrium and formation constants, and the resolved spectra, 205–8
Macro–inorganics. Part 3. Chelation of copper(II) ion with some polymers having a poly(amidoamine) structure and their nonmacromolecular models, 253–6
Kinetics and mechanism of the activation of molecular hydrogen by bis(dimethylglyoximato)cobalt(II) derivatives, 276–83
Reaction of cobalt(II) macrocyclic tetraamine complexes with dioxygen, 327–33
Polar and steric effects in the stability of silver complexes of primary amines, 416–18
Electrochemical studies on alkali–metal complexes with the small macrocycle 1,4,7,10–tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Binary and ternary complexes of copper(II) involving imidazole, histamine, and L–histidine as ligands, 1312–16
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13–tetraazacyclohexadecane, 1722–5
Mixed–ligand complex formation by copper(II) with imidazole derivatives and dipeptides in aqueous solution, 2138–42
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc–histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
STAINING
Studies on transition metal nitrido and oxo complexes. Part 6.

STAINING(contd)
Nitrido–bridged complexes of osmium and ruthenium, 2410–14
STANNYL
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
STANNYLMETHYLCYCLOPENTADIENE
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
STEREOCHEM
Crystal structure of gadolinium(III) acetate tetrahydrate. Stereochemistry of the nine–coordinate [M(bidentate ligand)$_3$(unidentate ligand)$_3$]$^{x\pm}$ system, 454–8
Hydrocarbon complexes of iron, ruthenium, and osmium. Part 15. Stereochemical nonrigidity of hexacarbonyldiruthenium complexes of monosubstituted cyclooctatetraenes, 552–8
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
Crystal structure of bis(2–aminoethyl)amine(di–2–pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)–doped system, 1105–11
STERIC
Carbonyl insertion at [PtX(Ph)(CO)L]: the effects of varying the anionic ligand X and the neutral ligand L, 712–15
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
STIBINE
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Studies in Moessbauer spectroscopy. Part 13. Iodine–129 spectra of some palladium(II) and platinum(II) iodo complexes, 895–900
Organosilicon chemistry. Part 26. Silyl derivatives of substituted cobalt carbonyls, of the type [Co(SiR$_3$)(CO)$_n$L$_{4-n}$], 923–7
Chlorine–containing mixed halogen adducts of triphenylphosphine, triphenylarsine, and triphenylstibine, 1545–9
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals •MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
STRONTIUM
Ruthenium–99 and europium–151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
Metal–ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten–coordinate barium(II) complex, 942–8
STYRENE
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
SUBSTITUENT
Stereochemically nonrigid silanes, germanes, and stannanes. Part 5. Characterization of nondegenerate rearrangements in methylcyclopentadienyl derivatives using carbon–13 nuclear magnetic resonance spectroscopy, 159–62
Kinetics of the displacement of chloride in 5–substituted–1,10–phenanthrolinedichloropalladium(II) complexes, 2044–5
SUBSTITUTION
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Comparison of structure and reactivity of bis(2–aminoethyl)amine– and bis(2–aminoethyl)amidochlorogold(III) complexes, 220–3
New aminocyclodiphosph(III)azanes and the influence of geometrical isomerism on their properties, 321–6
Consecutive substitution in, and reduction of, η–allyl molybdenum(II) complexes, and a study of ligand exchange in a molybdenum(0) product, 565–9
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine–, –arsine–, and –stibinedicarbonyl(1–2–η:3–4–η–1,4–diphenyl–1–azabuta–1,3–diene)iron, 634–7
Kinetics of ligand exchange between ethylenedinitrilotetraacetatocuprate(II) and triethylenetetraaminecadmium(II), 958–61
Reactions of coordinated ligands. 22. Reactivity of bis(ethylene)(η^5–indenyl)rhodium in displacement reactions with olefins, dienes, and acetylenes; structure of η^5–indenyl(1–2:3–4–η^4–[6–endo–propen–2–yl–1,2,3,4–tetrakis(trifluoromethyl)cyclohexa–1,3–diene])rhodium formed in a cyclo–cotrimerisation reaction, 962–72
Naphthalene complexes. Part 1. Metal vapor preparation of bis(η^6–naphthalene)chromium(0) and its arene replacement reactions, 991–5
Kinetics and mechanism of mono– and diolefin exchange at five–coordinate iron(0), 999–1004
Ligand substitution reactions of neutral and cationic allyl(cycloocta–1,5–diene)platinum complexes, 1208–19
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Equilibriums in complexes of N–heterocyclic molecules. Part 29. An electron spin resonance study of some N–heterocyclic complex ions of silver(II), 1277–81
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, Br(CH$_2$)$_n$Br (n = 2–12), 1408–15
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species [M(CO)$_5$(mthf)] (M = Cr, Mo, W, or V^{-1}), cis–[M(CO)$_4$(mthf)$_2$], and fac–[M(CO)$_3$(mthf)$_3$] (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
Selective cleavage of the two types of Pd–N bonds in di–μ–halobis[arylazooximatopalladium(II)], 1698–702
Effects of added alkali metal and alkylammonium bromides on the kinetics of reaction between the [PdCl(Et$_2$N(CH$_2$)$_2$NH(CH$_2$)$_2$N–Et$_2$)]+ cation and bromide ion in aqueous solutions, 1809–11
Reactions of 1–3–η–allylmanganese and –rhenium tetracarbonyls with phosphines, phosphites, and triphenylarsine. The crystal and molecular structure of 1–3–η–allyldicarbonylbis(trimethyl phosphite)manganese(I), 2129–37
Kinetics and mechanism of diene exchange at six–coordinate chromium, 2237–40
Mercury(II)– and nitrosyl–induced aquation of anionopentaaminecobalt(III) species. Reactions of the t–[Co(N(CH$_2$CH$_2$NH$_2$)$_3$)(NH$_3$)X]$^{2+}$ ions (X = Cl$^-$ or N$_3^-$) and the importance of ion pairs, 2255–8
Salt effects on the kinetics of substitution of the pentacyano(pyrrolidine)ferrate(II) ion, 2297–9
Nitrato complexes of iridium. Part 2. M_2[Ir(NO$_3$)$_6$] (M = K, Rb, or Cs), 2382–4
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
SULFATE
Chemistry of polydentate ligands. Part 5. Complexes of 2,9–dihydrazino derivatives of 1,10–phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Influence of electrolytic dissociation upon rates of reactions. Part 9. The aquation of chloro– and bromo–pentaamminecobalt(III) and of –pentaamminechromium(III) in aqueous and 10% ethanol solutions of sulfate and dicarboxylates, 1726–30
Solution calorimetry of nitrosonium salts, 2415–17

SULFATO
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
SULFIDE
Palladium(II) complexes derived from the ligands 2,2,N,N–tetramethylpent–4–enylamine and 2,2–dimethylpent–4–enyl methyl sulfide. Crystal structures of dichloro[2,2–dimethylpent–(E)–3–enyl] methyl sulfide]palladium(II) and chloro[1–3–η–syn–1–(1,1'–dimethyl–2'–methylthioethyl)allyl]palladium(II), 137–44
Phosphorus–phosphorus nuclear spin coupling in tetraorganobiphosphines and some of their derivatives, 240–4
Crystal structure of γ–monoclinic selenium, 624–7
Heterogeneous catalysis in solution. Part 19. The effect on oxidation–reduction reactions of certain sparingly soluble salts and other solids, 860–4
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
Reduction of gold(III) to gold(I) by dialkyl sulfides. Evidence for an atom–transfer redox process, 1017–21
Sulfur–ligand–metal complexes. Part 8. Bis(diphenylphosphinothioyl)methane complexes of copper(I), 1042–7
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Photocondensation of mer–trichlorotris(diethyl sulfide)iridium(III) 1791–3
Preparation of some thionitrosyl–type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 2. Pyramidal inversion and novel fluxional rearrangements in $[(PtXMe_3)_2(MeEEMe)]$ (E = S or Se) complexes, 2220–7
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
SULFINATE
Synthesis and chemistry of some palladacyclopentanes, 1633–7
SULFINATO
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
SULFOLANE
Solutions of hydrogen bromide in sulfolane, 2028–31
SULFONATE
Crystal structure, and the infrared and Raman spectra, of tripotassium methanetrisulfonate hydrate, $K_3[CH(SO_3)_3].H_2O$, 149–55
Crystal structure and the infrared and Raman spectra of potassium nitridosulfonate hydrate, $K_3[N(SO_3)_2].H_2O$, 1091–7
Crystal structure, and the infrared and Raman spectra, of potassium hydroxylamine–N,O–disulfonate, $K_2[O_3SONHSO_3]$. The infrared and Raman spectra of potassium hydroxylaminetrisulfonate sesquihydrate, $K_3[O_3SON(SO_3)_2].1.5H_2O$, 2199–207
SULFONATO
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
SULFONATOPHTHALOCYANINE
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24–tetrasulfonatophthalocyanine in aqueous solution, 1297–9
SULFONYL
Mechanistic studies of some oxidative–addition reactions: free–radical pathways in the Pt^0–RX, Pt^0–PhBr, and Pt^{II}–$R'SO_2X$ reactions (R = alkyl, R' = aryl, X = halide) and in the related rhodium(I) or iridium(I) systems, 1448–56
SULFOPHTHALOCYANINE
Free radical reactions with dimeric cobalt(II) sulfophthalocyanine. A pulse radiolytic study, 476–80
SULFUR
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Crystal and molecular structure of bis(tetrasulfur tetraimide)silver(I) perchlorate sesquihydrate, 355–9
Standard enthalpy of formation of bis(diethyldithiocarbamato)nickel(II) at 298 K and the nickel–sulfur bond energy, 763–6
Rapid transfer of selenium from tertiary phosphine selenides to tertiary phosphines, 871–4
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in $[ReCl_3(RNO)(OPPh_3)]$, 1145–9
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
Studies relating to the ferredoxins. Part 2. Exchange reactions of some cysteine–glycine peptides with the iron–sulfur cluster compound bis(tetramethylammonium) tetrakis(μ_3–sulfido–tert–butylthioiron), 1228–35
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Oxygen–transfer reactions in platinum metal complexes of nitric oxide and sulfur dioxide, 1572–6
Determination of the separate barrier energies for six–membered ligand ring reversal and pyramidal sulfur inversion in complexes of palladium(II) and platinum(II). A dynamic proton and carbon–13 nuclear magnetic resonance study, 1582–92
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)].EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Nuclear magnetic resonance investigations of configurational nonrigidity in dinuclear platinum(IV) complexes. Part 1. Ring reversal, pyramidal inversion, and novel fluxional rearrangements in $[(PtXMe_3)_2(MeECHREMe)]$ (E = S or Se) complexes, 2208–19
SULFURYL
Heats of formation of sulfuryl chlorofluoride and lead chlorofluoride, 817–20
SUSCEPTIBILITY
Exchange interaction in tetrameric oxygen–bridged copper(II) clusters of the cubane type, 875–9
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
A magnetic susceptibility study of spin–state transitions in rare earth trioxocobaltates(III), 1397–400
Crystal and molecular structure and magnetic properties of tetrakis[bromo(2–diethylaminoethanolato)copper(II)]–tetrachloromethane (1/4), a complex with a ferromagnetic ground state, 1703–9
Magnetic properties and superexchange in single chloride–bridged copper(II) chain compounds, 2121–4
SUSPENSION
Formation of lead–bearing ferrite in aqueous suspension by air

SUSPENSION(contd)
oxidation, 825–8
TAFT
Polar and steric effects in the stability of silver complexes of primary amines, 416–18
TANTALUM
An electron paramagnetic resonance study of tetracyclopentadienyltantalum(IV), $[Ta(\sigma\text{-}C_5H_5)_2(\eta\text{-}C_5H_5)_2]$, 426–8
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Mono- and bis-η-cyclopentadienyl derivatives of niobium and tantalum: improved synthetic routes via trialkyl(cyclopentadienyl)tin reagents, 2155–61
TAUTOMERIZATION
Kinetics and mechanism of the reactions of uranyl ion and β-diketones in methanol–water (9:1 v/v), 1502–10
TELLURATE
Crystal and molecular structure of bis(N,N'-dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
TELLURIUM
Dynamic properties and solution structures of the clusters $[Fe_3(CO)_9X_2]$ (X = S, Se, Te, or NMe) and their derivatives, 46–51
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
Crystal and molecular structure of bis(N,N'-dimethylformamidine)-disulfidehexachlorotellurate, 2303–5
TEMPLATE
Chemistry of polydentate ligands. Part 7. Synthesis, characterization, and properties of some manganese(II) complexes of quinquedentate macrocyclic ligands based on 1,10-phenanthroline. Crystal and molecular structure of a complex with pentagonal-pyramidal coordination geometry about the Mn(II), 1383–9
Chemistry of polydentate ligands. Part 8. Preparation and properties of iron(II) complexes with quinquedentate macrocyclic ligands. Crystal and molecular structure of a compound where high-spin Fe(II) sits in the ligand cavity. Electrochemistry of a series of complexes with the macrocycles, 1390–6
TERPYRIDYL
Crystal structure of bis(isocyanato)(2,2:6',2''-terpyridyl)cobalt(II): stereochemistry of $[M(\text{tridentate ligand})(\text{unidentate ligand})_2]$ complexes, 1932–8
TERTIARY
Crystal structures of meso-ortho-phenylenebis(methylphenylphosphine) and its monoprotonated tetrafluoroborate salt, 1567–71
TETRAAZACYCLOHEXADECANE
Enthalpic and entropic contributions in the reactions of hydrogen, copper(II), and nickel(II) ions with the macrocycle 1,5,9,13-tetraazacyclohexadecane, 1722–5
TETRAAZACYCLOTETRADECANE
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11-tetramethyl-1,4,8,11-tetraazacyclotetradecane)nickel(II) and -cobalt(II) ions towards associative solvent exchange, 574–8
Natural abundance nitrogen-15 nuclear magnetic resonance spectroscopy of heavy metal complexes of trans-1,2-diaminocyclohexane-N,N,N',N'-tetraacetate ion and 1,4,8,11-tetraazacyclotetradecane, 721–5
Comparative study of the electrochemical and pulse-radiolytic oxidation of the complexes of nickel(II) and copper(II) containing 1,4,8,11-tetraazacyclotetradecane, 1243–7
Thermodynamic studies on the complexation reaction of copper(II) macrocyclic tetraamine complexes with hydroxide ion, 1349–51
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''-tetra(2-cyanoethyl)-1,4,8,11-tetraazacyclotetradecane with nickel(II), 2117–20
TETRACHLORO
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
TETRACHLOROCOBALTATE
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 1. Magnetic structure factors from polarized neutron diffraction, 2333–8
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ ion, 2339–47
TETRADENTATE
Crystal structure and electronic properties of ammine[tris(2-aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
TETRAHYDROTHIOPHENE
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon-13 nuclear magnetic resonance spin-lattice relaxation study, 363–8
Bis adducts of phthalocyaninatoiron(II) with Group 6A axial donor atoms. Crystal and molecular structure of sulfur-bonded bis(dimethyl sulfoxide)phthalocyaninatoiron(II)-dimethyl sulfoxide (1/2), 1965–9
TETRAHYDROTHIOPHENECARBOXYLATE
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
TETRAMER
Exchange interaction in tetrameric oxygen-bridged copper(II) clusters of the cubane type, 875–9
TETRAMETHYLUREA
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
A proton magnetic resonance study of ligand exchange on the hexakis(1,1,3,3-tetramethylurea)scandium(III) ion and its N,N-dimethylacetamide analog, 699–704
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
TETRAMINE
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
TETRANITRIDE
Some reductions of sulfur-nitrogen-chloride compounds to give tetrasulfur tetranitride, 1457–60
TETRANUCLEAR
Magnetic exchange interactions in tetranuclear copper(II) complexes. Effect of ligand electronegativity, 786–9
TETRAOXACYCLODODECANE
Electrochemical studies on alkali-metal complexes with the small macrocycle 1,4,7,10-tetraoxacyclododecane. Polarographic and potentiometric determination of the stability constants in propylene carbonate, 865–8
TETRASULFONATOPHTHALOCYANINE
Electron spin resonance study of the species formed by reduction of iron(III) chelates of tetrasodium 3,10,17,24-tetrasulfonatophthalocyanine in aqueous solution, 1297–9
TETRASULFUR
Some reductions of sulfur-nitrogen-chloride compounds to give tetrasulfur tetranitride, 1457–60
TETRATHIATRIAZENIUM
Preparation of a conducting iodinated poly(sulfur nitride), 937–41
TETRATHIO
Crystal and molecular structure of dimorpholinotetrasulfane, 632–3
THALLIUM
Thallium-205 nuclear magnetic resonance spectra of thallium(I) alkoxides, 1439–42
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
THEORY
Spin density and bonding in the $CoCl_4^{2-}$ ion in Cs_3CoCl_5. Part 2. Valence electron distribution in the $CoCl_4^{2-}$ ion, 2339–47
A nonempirical appraisal of the angular overlap model for transition metal complexes, 2395–400
THERMOCHEM
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
THERMODN
Intramolecular charge-transfer decomposition of the μ-peroxobis[pentaamminecobalt(III)] complex in acidic solutions. Stabilization by protonation and the effect of chloride and sulfate, 14–18
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Mechanism and equilibrium constants of the reaction between carbon monoxide and triphenylphosphine-, -arsine-, and -stibinedicarbonyl(1-2-η:3-4-η-1,4-diphenyl-1-azabuta-1,3-diene)iron, 634–7
A phosphorus-31 nuclear magnetic resonance investigation of the structure, equilibriums, and kinetics of $[Pt(PR_3)_n]$ in solution, 776–85
Enthalpic and entropic contributions in the reactions of hydrogen,

THERMODN(contd)
copper(II), and nickel(II) ions with the macrocycle 1,5,9,13–tetraazacyclohexadecane, 1722–5
Solutions of hydrogen bromide in sulfolane, 2028–31
Kinetics and thermodynamics of fast square planar–octahedral interconversion. Part 3. The reaction of [biacetylbis–α–hydroxybenzylidenehydrazone(2–)–N^1,N^1',O,O']nickel(II) with bidentate heterocyclic amines in chlorobenzene, 2456–61
THF
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
THIATRIAZADIPHOSPHORINE
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
THIAZOLINETHIOLATE
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)]$.EtOH, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
THIENYLBUTANEDIONE
Kinetics and mechanisms of the reactions of vanadyl ion with β–diketones, 7–13
THIO
Synthesis and physicochemical characteristics of alkane (or arene)–thio–,–sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Electron spin resonance studies of axial ligation to cobalt(II) complexes. Part 1. Some oxo–, thio–, and seleno–Schiff bases, 2388–94
THIOACETATE
Antimony(III) acetate and thioacetate: spectra and crystal structures, 1292–6
THIOBENZOATE
Metal complexes of sulfur ligands. Part 20. Reaction of bis(dimethylphenylphosphine)bis(monothiobenzoato)ruthenium(II) with bidentate nitrogen–donor Lewis bases and x–ray structural analyses on two isomers of bis(dimethylphenylphosphine)bis(monothiobenzoato)(1,10–phenanthroline)ruthenium(II), 804–9
THIOCARBAMATE
A physicochemical study of the copper(II) chelates of 3–hydroxyphenylrhodanine. Its mixed–ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
THIOCARBAMATO
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
Standard enthalpy of formation of bis(diethyldithiocarbamato)copper(II) at 298 K and the copper–sulfur bond energy, 1638–40
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed–ligand zinc complexes derived from 2–mercaptobenzothiazole, –benzoxazole, and –benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)]$.EtOH, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
THIOCARBAMATOIRON
Stereochemistry of [M(bidentate ligand)$_2$(unidentate ligand)]. Crystal structure of iodobis(pyrrolidinyldithiocarbamato)iron(II)–iodine (2/1), 1921–7
Crystal structure of tris(NN–diethyldithiocarbamato)iron(IV) pentaiodide, 1928–31
THIOCARBAMATOZINC
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole–2–thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
THIOCARBAZATE
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2\text{–}N{:}C(\text{–}S)SCH_3)_2]$ and comparison with quantum–mechanical calculations, 1087–90
Thermal behavior and crystal structure of dichlorobis(methyl 2–methyldithiocarbazate–N^2S)cobalt(II)–methyl 2–methyldithiocarbazate (2/1), $[Co(NH_2NMeC(=S)SMe)_2Cl_2]\cdot 0.5[NH_2NMeC(=S)SMe]$, 1893–7
THIOCARBONATO
Synthesis and reactivity of the paramagnetic nitrosyl complexes $[M(NO)(NCMe)_5]^{2+}$ (M = Cr or Mo), and the crystal structures of $[Cr(NO)(S_2CNEt_2)_3]$ and $[CrF(NO)(dppe)_2]$, 2162–9
THIOCYANATE
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Crystal structure of 4–phenyl–1,2–dithia–3,5–diazole dimer, 1812–15
THIOCYANATOCHROMATE
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
THIOETHER
Synthesis and properties of some lanthanoid(III) perchlorates with macrocyclic polythioethers of the [18]–crown–6–type. Crystal structure of aquadiperchlorato(1,4,10,13–tetraoxa–7,16–dithiacyclooctadecane)lanthanum(III) perchlorate, 376–82
Structural and mechanistic studies of coordination compounds. Part 25. Synthesis and characterization of some octahedral haloamine and –thioether complexes of ruthenium(II) and –(III), 756–62
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, dimethyl disulfide, and dimethyl diselenide, 1169–74
A nuclear magnetic resonance study of sulfur and selenium inversion in complexes of trimethylplatinum(IV) halides with dithio– and diseleno–ethers, 1175–81
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
Platinum(II) and palladium(II) complexes of some chelating polyfluoroalkyldithioethanes, 2434–41
THIOHYDROXAMATE
An electrochemical study of thiohydroxamate and hydroxamate complexes of iron(III), 1112–17
THIOL
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
X–ray photoelectron spectra of some gold compounds, 767–70
Preparation of the sixteen–atom ring chelates trans–$[M_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, M = Pd or Pt: crystal structure of trans–$[Pd_2Cl_4(Me_3CS(CH_2)_5SCMe_3)_2]$, 2309–11
THIOLATE
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
THIOMETHYLPHENYL
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
THIOMETHYLPHENYLPALLADIUM
Cyclopalladation of $C_6H_4(CH_2SBu^t)_2$–1,3 and the crystal structure of [2,6–bis(tert–butylthiomethyl)phenyl–C^1,S,S']chloropalladium(II), 2312–14
THIOMORPHOLINE
Crystal and molecular structure of dimorpholinotetrasulfane, 632–3
THIOPHENE
Interactions of some nitrogen, oxygen, and sulfur heterocycles with gadolinium and nickel chelates. A carbon–13 nuclear magnetic resonance spin–lattice relaxation study, 363–8
THIOPHENOLATO
Synthesis and crystal structure of tetramethylammonium μ–pentachlorothiophenolatobis[pentacarbonyltungstate(0)], 570–3
THIOSULFATE
Solid state vibrational spectroscopy. Part 7. A vibrational spectroscopic study of the thermal decompositions of sodium and potassium thiosulfate, 245–7
THIOUREA
Crystal and molecular structure of bis(N,N'–dimethylformamidine)–disulfidehexachlorotellurate, 2303–5
TiN
He(I) and He(II) photoelectron spectra of methyltin chlorides, 145–8
Structures of di–μ–hydroxobis[aquatrichlorotin(IV)]–1,4–

TIN(contd)
dioxane(1/3), di-μ-hydroxobis[aquatrichlorotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatribromotin(IV)]-1,8-epoxy-p-menthane(1/4), di-μ-hydroxobis[aquatrichlorotin(IV)]-water(1/4), and cis-diaquatetrachlorotin(IV)-water(1/3) 949–53
Chlorine-35 nuclear quadrupole resonance studies on some tin(IV) chloride adducts, 1164–8
Crystal and molecular structure of SnMePh[$C_{10}H_5$(OMe-5)(CH_2NMe_2-8)]Br and proton nuclear magnetic resonance study of the puckering of the chelate ring in five-coordinate triorganotin halides SnRR'[$C_{10}H_5$(OMe-5)(CH_2NMe_2-8)]X and SnRR'[$CH_2C_6H_4(CH_2NMe_2$-2)]X, 1352–8
Acetylenes and noble metal compounds. Part 15. Reactions of dialkylacetylenes with bis(acetonitrile)dichloroplatinum(II) and tin(II) chloride to give ionic cyclobutadieneplatinum–tin complexes, 1368–73
Some reductions of sulfur–nitrogen–chloride compounds to give tetrasulfur tetranitride, 1457–60
Investigation into aroylhydrazones as chelating agents. Synthesis and structural characterization of a tin(IV) complex with 2,6-diacetylpyridine bis(salicyloylhydrazone), 1970–3
Molecular dynamics of adducts of organotin(IV) and tin(IV) chlorides with NN'-ethylenebis(salicylideneimine) studied by temperature-dependent Moessbauer spectroscopy, 1983–7
Antimony-121 Moessbauer investigations of tin–antimony oxides, 2241–5
TITANIUM
Some reactions of cyclotetrathiatriazenium chloride (S_4N_3Cl) vapor at hot metal (iron, titanium, or silver) surfaces. An alternative route from S_4N_3Cl and silver to disulfur dinitride and hence poly(sulfur nitride), 731–5
Reactions of trimethylsilylcyclopentadiene derivatives with titanium, niobium, and tantalum halides, 1156–60
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Bis(η-cyclopentadienyl)molybdenum (and -tungsten or -titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Reactivity of new azido complexes of titanium and vanadium, 1800–2
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Synthesis and crystal structure of bis[σ-tricarbonyl(η^5-cyclopentadienyl)manganese]bis(η^5-cyclopentadienyl)titanium, 2315–17
Proton ENDOR and TRIPLE resonance spectra of a frozen solution of (1-8-η-cyclooctatetraene)(1-5-η-cyclopentadienyl)titanium, 2425–7
TOLUENEDITHIOLATE
Complexes of methylmercury(II) with dithiol ligands: spectroscopic and crystallographic studies. The crystal structure of trans-1 2-dimercaptocyclohexanebis[methylmercury(II)], [$Hg_2Me_2(S_2C_6H_{10})$], 1471–4
TOLYLIDYNE
Chemistry of di- and tri-metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ-tolylidyne groups; crystal structure of [PtW(μ-C·C_6H_4Me-p)(CO)$_2$(PMe_2Ph)$_2$(η-C_5H_5)], 1609–14
TOLYLIMIDO
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in [$ReCl_3$(RNO)($OPPh_3$)], 1145–9
TOLYLNITROSO
Further investigations on the reactivity of rhenium arylimido complexes and the deoxygenation reaction of RNO in [$ReCl_3$(RNO)($OPPh_3$)], 1145–9
TOLYLTRIAZENIDO
Aryltriazenido complexes. Crystal and molecular structure of trans-carbonyl(1,3-di-p-tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
TRANS
Structure and reactivities of six-coordinate first row transition metal nitrosyl complexes, 1359–67
TRANSFER
Solubility of potassium cyanide in mixed aqueous and nonaqueous media; Gibbs free energies of transfer of the cyanide ion, 1–6
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Carbon–oxygen and carbon–hydrogen bond cleavage in the reaction of [$(Ru(CO)_2(\eta^5$-$C_5H_2))_2$] with phosphite and phosphine ligands, 1845–51
TRANSITION
Stability and structure of transition metal complexes of azoles in aqueous solutions. Part 21. A comparison of the complex-forming capacity of 1,2-dimethylimidazole with that of other 1,3-diazoles, 24–8
The Moessbauer effect and chemistry. Part 9. Molecular motion in solids. The spectra of (η-cyclohexatriene)(η-cyclopentadienyl)iron(II) hexafluorophosphate, 180–5
Intervalence transfer in outer-sphere hexaammineruthenium(III) pentacyanoferrate(II) complexes, 471–5
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Chemistry of polydentate ligands. Part 5. Complexes of 2,9-dihydrazino derivatives of 1,10-phenanthroline. Dependence of coordination number of a ligand on the anion present, 736–42
Preparation and properties of 1-adamantoxides, 2-adamantoxides, and 1-adamantylmethoxides of Ti(IV), V(IV), Nb(IV), Nb(V), Cr(III), Cr(IV), Mo(IV), Mn(II), Fe(III), and Co(II). The crystal and molecular structure of tetrakis(1-adamantoxo)dimethylaminomolybdenum(IV), 901–10
Metal-ion template effects in the synthesis of polydentate Schiff base ligands. Part 1. Complexes of a potentially octadentate N_6O_2 ligand and the crystal and molecular structure of a ten-coordinate barium(II) complex, 942–8
Bonding properties of trinuclear metal carbonyls, 1005–11
Comparison of the ligating properties of disulfides and thioethers: dimethyl disulfide, dimethyl sulfide, and related ligands, 1022–8
Bonding studies of derivatives of pentaborane(9) through self-consistent charge calculations, 1236–42
Structure and reactivities of six-coordinate first row transition metal nitrosyl complexes, 1359–67
A magnetic susceptibility study of spin-state transitions in rare earth trioxocobaltates(III), 1397–400
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Ab-initio SCF molecular orbital calculations on dinitrogen transition metal complexes, 1425–33
Bis(η-cyclopentadienyl)molybdenum (and -tungsten or -titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Influence of solvation on the initial and transition states for anation reactions of transition metal complexes in mixed aqueous solvents 1494–501
The structures and fluxional behavior of the binary carbonyls; a new approach. Part 2. Cluster carbonyls $M_m(CO)_n$ (n = 12, 13, 14, 15, or 16), 1743–67
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3-propanediamine with either pyridine-2-carbaldehyde or pyrrole-2-carbaldehyde, 1794–6
Synthesis and properties of bis(tert-butyl)methoxides of chromium(III,IV), manganese(II), iron(III), cobalt(II), and copper(I). Crystal and molecular structures of LiCr[$OCH(CMe_3)_2$]$_4$.THF, Cr[$OCH(CMe_3)_2$]$_4$, and LiFe[$OCH(CMe_3)_2$]$_4$.$(Me_3C)_2$CHOH, 1863–71
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Coordination chemistry of (8-methyl-2-quinolylmethyl)di-tert-butylphosphine (mqp) with palladium, rhodium, iridium, and manganese: crystal structure of [$PdCl_2$(mqp)], 1974–82
Transition metal binding sites and ligand parameters, 2032–8
Some transition metal complexes derived from 1,9-bis(tritylthio)-3,7-diazanonane and the crystal structure of bis[(3,7-diazanonane-1,9-dithiolato-N,N',S,S')-nickel)-S,S']palladium(II), 2075–80
Study of ligand isomeric complexes of N-furfurylsalicylaldimine, 2319–22
Indirect location of hydride ligands in metal cluster complexes, 2509–16
A physicochemical study of the copper(II) chelates of 3-hydroxyphenylrhodanine. Its mixed-ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
Complexation of the macrocyclic hexaamine ligand 1,4,7,10,13,16-

TRANSITION(contd)
hexaazacyclooctadecane ('18–azacrown–6'), 2536–8
TRIAZENIDO
Aryltriazenido complexes. Crystal and molecular structure of trans–carbonyl(1,3–di–p–tolyltriazenido)bis(triphenylphosphine)iridium(I), 1098–100
TRIBORATE
Reactions of the octahydrotriborate(1–) anion, $[B_3H_8]^-$, with some complexes of cobalt(I), cobalt(II), rhodium(I), and iridium(I), and the characterization of the 'borallyl' complex $[Ir^{III}(\eta^3–B_3H_7)(CO)H(PPh_3)_2]$, 196–200
TRICARBONYL
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
TRIMETHYLAMINE
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
TRIMETHYLARSINE
Vibrational spectroscopic study of trimethylarsine–boron trihalide adducts, 2016–19
TRIMETHYLOLPROPANE
Metal carbonyl chemistry. Part 28. Reactions of decacarbonyldimanganese with trimethylolpropane phosphite, 407–11
Metal carbonyl chemistry. Part 29. Preparation and properties of the hydrides $[MnH(CO)_{5-n}(P(OCH_2)_3CEt)_n]$ (n = 1, 2, or 3), 412–15
TRIMETHYLPHOSPHINE
Synthesis of trimethylphosphine complexes of rhodium and ruthenium. X–ray crystal structures of tetrakis(trimethylphosphine)rhodium(I) chloride and chlorotris(trimethylphosphine)rhodium(I), 511–18
TRIMETHYLSILYLATION
Silicate species in solution. Part 1. Experimental observations, 393–8
Trimethylsilyl derivatives for the study of silicate structures. Part 7. Calcium silicate structures, 1282–91
Reactions of trimethylsilylated silicate anions in acidic medium. Part 1. Effect of Amberlyst 15 cation–exchange resin on the products of trimethylsilylation of hexameric ring silicates, 2068–74
TRIODIDE
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
TRIPLE
Proton ENDOR and TRIPLE resonance spectra of a frozen solution of (1–8–η–cyclooctatetraene)(1–5–η–cyclopentadienyl)titanium, 2425–7
TRIPTYCYL
Reactivity of bridgehead halides with pentacyanocobaltate(II), 1641–5
TRITHIATRIAZINE
Chlorine–35 nuclear quadrupole resonance studies of some six–membered ring systems containing nitrogen, sulfur, and/or phosphorus: α–$(NSClO)_3$, cis–$(NSClO)_2(NPCl_2)$, and $(NSClO)(NPCl_2)_2$, 1012–16
TRITYL
Synthesis and chemistry of some palladacyclopentanes, 1633–7
TRITYLTHIODIAZANONANE
Some transition metal complexes derived from 1,9–bis(tritylthio)–3,7–diazanonane and the crystal structure of bis[(3,7–diazanonane–1,9–dithiolato–N,N',S,S')–nickel)–S,S']palladium(II), 2075–80
TROPOLONATO
Crystal structures of diethyldithiocarbamatodiphenylthallium(III) and diphenyltropolonatothallium(III), 1550–5
TROPONE
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x–ray crystal structure of $[(Fe(CO)_3[\eta^5–C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one–electron oxidant, 1710–15
TUNGSTATE
Redox potential–structure relationships in metal complexes. Part 2. The influence of trans–substituents upon the redox properties of dinitrogen complexes of molybdenum and tungsten and carbonyl analogs: inner–sphere versus outer–sphere electron transfer in the alkylation of coordinated dinitrogen, 121–7
Synthesis and crystal structure of tetramethylammonium μ–pentachlorothiophenolatobis[pentacarbonyltungstate(0)], 570–3
Studies on the μ–(NN')–ethylenediaminetetraacetatodi–μ–oxobis[oxotungstate(V)], $[W_2O_4(edta)]^{2-}$, Complex in aqueous solutions. Formation of an aquo ion and redox properties, 1101–4
TUNGSTEN
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
Reactions of organosulfur ligands on tungsten centers. Evidence for carbonium ion formation in the degradation of alkanethiolatopentachlorotungsten(VI) species, 257–61
Structural studies on the [M(bidentate ligand)(unidentate ligand)$_5$] system. A new coordination type of $[MI_2(CO)_3(Ph_2P(CH_2)_nPPh_2–)]$ (M = Mo or W; n = 1–3), 440–6
Protonation of isonitriles ligating molybdenum(0) and tungsten(0) at nitrogen giving complexes of carbyne and carbene ligands, 492–8
Diazoalkane complexes and related compounds from reactions of dinitrogen complexes of tungsten and molybdenum with gem–dibromides, and from condensation of hydrazido(2–) complexes with aldehydes, 771–5
Nature of the novel $C_{15}H_{15}$ ligand in $[W(CO)_2(\eta^5–C_5H_5)(\eta^3–C_{15}H_{15})]$, 1032–5
The formation of diazoalkane and diazenido complexes from the reaction of methyl bromide with trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten in various solvents, 1129–34
Diazoalkane complexes of tungsten. Crystal structures of $[WBr(N–N:CHCH_2CH_2CH_2OH)(dppe)_2][PF_6].0.5EtOH$(1) and $[WBr(N–N:CMe_2)(dppe)_2]Br.0.5MeOH$(2), 1150–5
Pentagonal–bipyramidal molybdenum– and tungsten(II) derivatives: crystal and molecular structure of 1–3–η–allyldicarbonylchlorobis(trimethyl phosphite)molybdenum(II), 1317–23
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Bis(η–cyclopentadienyl)molybdenum (and –tungsten or –titanium) complexes with chelate imidazole derivatives and related ligands, 1443–7
Crystal and molecular structure of trichlorooxobis(triphenylphosphine oxide)tungsten(V), (1). Single crystal electron spin resonance spectra of (1) and tetraphenylarsonium aquatetrachlorooxotungstate(V) and electronic structures of these and some related molybdenum(V) compounds, 1475–81
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu–C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 3. Synthesis of bimetallic platinum–tungsten complexes with μ–tolylidyne groups; crystal structure of $[PtW(\mu–C·C_6H_4Me–p)(CO)_2(PMe_2Ph)_2(\eta–C_5H_5)]$, 1609–14
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 4. Synthesis of triangulo–diplatinum–chromium and –tungsten complexes. Crystal structure of $[Pt_2W(\mu–C(OMe)Ph)(CO)_6[P(CMe_3)_2Me]_2]$, 1615–24
Preparation of the solvated iron(II) cation in acetonitrile using high oxidation–state fluorides and its reaction with trimethyl phosphite, 2001–5
Preparation and structure of azidopentafluorotungsten(VI), 2294–6
Moessbauer and electrochemical studies on Fe_3MoS_4 and Fe_3WS_4 cubane–like cluster dimers, 2354–9
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
TUNGSTENOCENE
Synthesis and reactions of binuclear molybdenocene and tungstenocene derivatives, 29–40
URANIUM
Crystal structure of tetra(glycolato)uranium(IV) dihydrate, a photoreduction product of uranyl ions in the presence of glycolic acid, 1182–5
Photochemistry of uranium(IV) 1,3–diketonates in organic solvents 1324–7

URANYL
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 1. 2,6–Diacetylpyridine bis(2'–pyridylhydrazone) 459–66
Reactivity of uranyl ion with quinquedentate chelating hydrazine derivatives. Part 2. 2,6–Diacetylpyridine bis(4–methoxybenzoylhydrazone), 1304–11
Kinetics and mechanism of the reactions of uranyl ion and β–diketones in methanol–water (9:1 v/v), 1502–10
UREA
Characterization of some high–spin iron(III) complexes with urea derivatives. Crystal structure of diaquatetrakis(perhydropyrimidin–2–one)iron trichloride dihydrate and of perhydropyrimidin–2–one, 646–53
UV
The electronic spectra of the mixed mercury dihalides. Part 1. Computational procedures for calculating spectra, for a new route to equilibrium and formation constants, and the resolved spectra, 205–8
The electronic spectra of the mixed mercury dihalides. Part 2. Identification, equilibrium and formation constants, and assignment of transitions, 209–15
Chromium(II) chemistry. Part 13. Thiocyanates, 262–8
Potassium hexanitratocobaltate(III), 314–16
Infrared and electronic spectra of matrix–isolated chromium(V) trichloride oxide, 419–22
Synthesis and fluxional character of complexes of the type $[M_2(cp)_2(CO)_3(CNR)]$ (M = Fe or Ru, cp = η–C_5H_5), 503–10
Pulse radiolysis studies of iron(I) in aqueous solutions, 586–9
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
Electronic properties and crystal structures of the copper–doped zinc(II) bis(pyridine–3–sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
The chemistry of isomeric eicosaboranes, $B_{20}H_{26}$. Molecular structures and physical characterization of 2,2'–bi(nido–decaboranyl) and 2,6'–bi(nido–decaboranyl), 790–6
Electronic spectra of some rhodium(III) complexes of saturated cyclic tetramines, 810–12
Temperature– and wavelength–dependent photochemistry of $[Cr(CO)_5(NMe_3)]$ in argon and xenon matrixes. Evidence for the formation of $[Cr(CO)_5]$ and novel $[Cr(CO)_4(NMe_3)]$ complexes with three different types of symmetry, 1328–35
Photochemistry of $[Fe(CO)_4L]$ complexes (L = NMe_3 or pyridine) in argon and xenon matrixes. Evidence for the formation of C_{3v} $[Fe(CO)_3L]$ and the reversible infrared–induced isomerization of C_s $[Fe(CO)_3L]$, 1336–41
Unsymmetrical ligand complexes of copper(II), nickel(II), and cobalt(II) derived from salicylaldehyde and 1,3–propanediamine with either pyridine–2–carbaldehyde or pyrrole–2–carbaldehyde, 1794–6
Synthesis and physicochemical characteristics of alkane (or arene)–thio–, –sulfinato–, and –sulfonatoindium(III) porphyrins. Crystal structure of methanesulfonato(5,10,15,20–tetraphenylporphyrinato)indium(III), 2081–9
Equilibriums in complexes of N–heterocyclic molecules. Part 30. Reaction of 5–nitro–1,10–phenanthroline with aqueous bases, 2102–7
Chemistry of structurally developed macrocycles. Part 1. Complexation properties of N,N',N'',N'''–tetra(2–cyanoethyl)–1,4,8,11–tetraazacyclotetradecane with nickel(II), 2117–20
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
Electronic and resonance–Raman spectra of the linear–chain mixed valence platinum complexes $[Pt(en)_2][Pt(en)_2X_2])_3[CuX_4]_4$ [X = Cl or Br] and $[Pt(pn)_2][Pt(pn)_2Br_2][Cu_3Br_5]_2$ (en = ethane–1,2–diamine and pn = propane 1,2–diamine), 2498–502
Bivalent metal complexes of 1,11–diamino–3,6,9–trithiaundecane and the crystal structures of adducts with nickel(II) and copper(II) bromides, 2503–8
VA
Bulky alkyls, amides, and aryloxides of main group 5 elements. Part 1. Persistent phosphinyl and arsinyl radicals •MRR' and their chloro precursors MRR'Cl and related compounds, 2428–33
VALENCE
A study of copper compounds by x–ray absorption spectroscopy, 837–9
VANADATE
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
VANADIUM
Kinetic data for outer sphere vanadium(2+) and hexaammineruthenium(2+) reductions of platinum(IV) complexes and a correlation of rate constants, 19–23
Electronic absorption spectra of some oxovanadium(IV) compounds, 667–74
Reactions of metal atoms with poly(methylphenylsiloxanes) and other polymers and compounds of low volatility, 1401–7
Re–examination of the electron spin resonance spectrum of trigonal–prismatic bis[pentane–2,4–dione benzoylhydrazonato(2–)]vanadium(IV), 1731–3
Reactivity of new azido complexes of titanium and vanadium, 1800–2
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
Hexaisothiocyanates of vanadium(II), 2042–3
Kinetics of the oxidation of 2–hydroxy–2–methylpropanoic acid by aquavanadium(V) ions in aqueous perchlorate media, 2143–6
VANADYL
Kinetics and mechanisms of the reactions of vanadyl ion with β–diketones, 7–13
Kinetics and mechanism of the oxidation of hydroxylamine by aquavanadium(V) ions in aqueous perchlorate media, 1532–6
Crystal structure of vanadyl phthalocyanine, phase II, 2300–2
VB
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92
VIA
Some oxidation reactions of aminocyclodiphosph(III)azanes, 928–36
VIB
Paramagnetic carbenemetal complexes. Part 1. Cationic chromium(–I) complexes and the chemistry of their chromium(0) precursors and of related molybdenum(0) and tungsten(0) complexes, especially with bulky carbene ligands C(OR')R [R = $CH(SiMe_3)_2$ or CH_2SiMe_3], 90–8
One–electron reduction of diimidosulfur compounds, $S(NR)_2$, and some complexes of Group 6A metal carbonyl derivatives containing $S(NR)_2$ ligands: studies of the radical products by electron spin resonance spectroscopy, 880–7
Synthesis and structural studies of chromium, molybdenum, and tungsten compounds containing cyclopentadienyl–like ligands. Part 3. Dicarbonylnitrosyl(η–pentamethylcyclopentadienyl) complexes, 1253–8
Reactions of trans–bis[1,2–bis(diphenylphosphino)ethane]bis(dinitrogen)tungsten and –molybdenum with α,ω–dibromides, $Br(CH_2)_nBr$ (n = 2–12), 1408–15
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 1. Synthesis of platinum–chromium, –molybdenum, and –tungsten compounds; crystal structure of $[(OC)_5W(\mu\text{–}C(OMe)Ph)Pt(PMe_3)_2]$ (Pt–W), 1593–600
Metal carbonyl photochemistry. Part 1. Photolysis of the Group 6 hexacarbonyls in hydrocarbon glasses; the species $M(CO)_5$, $M(CO)_4$, $M(CO)_3$, and $[M(CO)_5(OH)_2]$, 1646–50
Metal carbonyl photochemistry. Part 2. Photochemistry of hexacarbonyls in glasses containing oxygen donors; the species $[M(CO)_5(mthf)]$ (M = Cr, Mo, W, or V^{-1}), cis–$[M(CO)_4(mthf)_2]$, and fac–$[M(CO)_3(mthf)_3]$ (M = Cr, Mo, or W) (mthf = 2–methyltetrahydrofuran), 1651–4
Synthesis and proton magnetic resonance properties of Fe_3MS_4 (M = Mo or W) cubane–like cluster dimers, 2360–8
VIII
Complexes of nickel(II), palladium(II), and platinum(II) with the β–ketophosphines $P(CMe_3)_2(CH_2COR)$ (R = Ph or CMe_3), 299–301
Chemistry of di– and tri–metal complexes with bridging carbene or carbyne ligands. Part 2. Formation of manganese–platinum, –palladium, and –nickel compounds, and the crystal structures of

VIII(contd)
two forms of $[(OC)_4Mn(\mu\text{–}(1\text{–}\sigma,1\text{–}2\text{–}\eta\text{–}C{:}CH\text{–}CH_2\text{–}CH_2\text{–}O))Pt(PMe_3)_2]$ (Mn–Pt), 1601–8
Reduction–oxidation properties of organotransition metal complexes. Part 9. Silver(I) adducts of cyclic polyeneone complexes, the x-ray crystal structure of $[(Fe(CO)_3[\eta^5\text{–}C_5Ph_4OAg(OH_2)])_2][PF_6]_2$, and comments on the use of the silver(I) ion as a one-electron oxidant, 1710–15
Coordination chemistry of higher oxidation states. Part 1. Thioether complexes of osmium(IV), iridium(IV), and platinum(IV), 1872–8
Preparation and properties of 1-adamantylmethyl and adamantyl complexes of transition metals, 1879–87
Preparation of some thionitrosyl-type transition metal complexes and their characterization by infrared, optical, and electron paramagnetic resonance spectroscopy: $[M(S_2N_2H)_2]$, $[M(S_2N_2H)(S_3N)]$, and $[M(S_3N)_2]$ (M = Co, Ni, Pd, or Pt), 1910–16
VINYL
Reactions of co-ordinated ligands. Part 21. Reaction of 3,3,3-trifluoroprop-1-yne with methyl- and benzyldicarbonyl(η-cyclopentadienyl)iron and of hexafluorobut-2-yne with tricarbonyl(1-3-η-2-methylallyl)cobalt. Crystal structure of [1-5-η-exo-1-acetyl-2,4,6-tris(trifluoromethyl)cyclohexadienyl](η-cyclopentadienyl)iron, 292–8
VINYLACETATE
Magnetic susceptibility and electron spin resonance of some copper(II) unsaturated carboxylates, 1379–82
VINYLPHENYLARSINE
The trans influence and trans effect of the arsine group. The x-ray structures of dichloro[diphenyl(o-vinylphenyl)arsine]platinum(II) and [1-(o-diphenylarsinophenyl)-2-methoxyethyl-As,C^1](hexafluoroacetylacetonato)platinum(II), 349–54
VISIBLE
Crystal structure and spectroscopic properties of a polynuclear complex between copper(II), diethylenetriamine, and ferrocyanide, 1272–6
Photochemistry of uranium(IV) 1,3-diketonates in organic solvents 1324–7
Crystal structure and electronic properties of ammine[tris(2-aminoethyl)amine]copper(II) diperchlorate and potassium pentaamminecopper(II) tris(hexafluorophosphate), 1342–8
VITAMIN
The chemistry of vitamin B_{12}. Part 17. The effect of steric distortion of the cobalt–carbon bond on the pK values and spectra of organocobalamins, 2259–66
The chemistry of vitamin B_{12}. Part 19. Labilization of the cobalt–carbon bond in organocobalamins by steric distortions; neopentylcobalamin as a model for labilization of the vitamin B_{12} coenzymes, 2274–81
VULCANIZATION
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole-2-thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed-ligand zinc complexes derived from 2-mercaptobenzothiazole, -benzoxazole, and -benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)].EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
WATER
Relative labilities of five coordinate mono(acetonitrile)(1,4,8,11-tetramethyl-1,4,8,11-tetraazacyclotetradecane)nickel(II) and -cobalt(II) ions towards associative solvent exchange, 574–8
Kinetics of the silver(I)-catalyzed decomposition of peroxodisulfate in aqueous solution, 726–30
Hydration of complexon complexes of lanthanide cations, 2151–4
XENON
A Raman spectroscopic study of noble gas fluoride adduct formation with bismuth pentafluoride, 1898–903
YTTERBIUM
Ruthenium-99 and europium-151 Moessbauer spectra of the ternary hydrides M_2RuH_6 (M = Ca, Sr, Eu, or Yb), 918–22
ZINC
Reactions of 1,1,1-tris(aminomethyl)alkanes with nickel(II), copper(II), zinc(II), and hydrogen ions. A calorimetric and spectrophotometric investigation, 519–25
Electronic properties and crystal structures of the copper-doped zinc(II) bis(pyridine-3-sulfonate) hydrate system: a fluxional CuN_2O_4 chromophore, 681–9
Electronic properties and stereochemistry of the bis(diethylenetriamine)copper(II) cation. Part 1. A fluxional elongated CuN_6 chromophore, 690–8
Chemistry of polydentate ligands. Part 6. Synthesis, characterization, and properties of group 2B cation complexes with novel quinquedentate macrocyclic ligands, 743–9
Proton nuclear magnetic resonance study of the self-association of 1,10-phenanthroline, 2,2'-bipyridyl, and their zinc(II) complexes 1079–86
Ultraviolet photoelectron spectra of some methyl esters of dithiocarbazic acids and of $[Ni(N(CH_3)_2\text{–}N{:}C(\text{–}S)SCH_3)_2]$ and comparison with quantum-mechanical calculations, 1087–90
Crystal structure of bis(2-aminoethyl)amine(di-2-pyridylamine)zinc(II) nitrate and the electronic properties of the copper(II)-doped system, 1105–11
Thermochemical study of adducts of tetramethylurea with zinc, cadmium, and mercury halides, 1823–6
The (bis-2,6-[1-(2-imidazol-4-ylethylimino)ethyl]pyridine)copper(I) cation. A synthetic copper(I) oxygen carrier in solution as a potential model for oxyhemocyanin, 1827–37
Aspects of the inorganic chemistry of rubber vulcanization. Part 1. Reactions of zinc bis(dithiocarbamates) and bis(benzothiazole-2-thiolates) with carboxylates, and the structure of $[NBu_4][(Zn(S_2CNMe_2)_2)_2(\mu\text{–}OCOMe)]$, 1939–44
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed-ligand zinc complexes derived from 2-mercaptobenzothiazole, -benzoxazole, and -benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)].EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
Histamine as a ligand in blood plasma. Part 3. Potentiometric study and simulated distribution of the zinc-histamine ternary complexes with cysteinate, histidinate, glutaminate, threoninate, and citrate, 2374–81
Kinetics and mechanism of displacement of zinc(II) by copper(II) in complexes of saturated macrocyclic tetraamines, 2447–51
A physicochemical study of the copper(II) chelates of 3-hydroxyphenylrhodanine. Its mixed-ligand chelate formation and conversion into a copper(II) dithiocarbamate chelate, 2517–21
ZINCATE
Aspects of inorganic chemistry of rubber vulcanization. 2. Anionic mixed-ligand zinc complexes derived from 2-mercaptobenzothiazole, -benzoxazole, and -benzimidazole. Structures of $[NEt_4][Zn(S_2CNMe_2)_3]$, $R[Zn(C_7H_4NS_2)_3(OH_2)]$, $R[Zn(S_2CNMe_2)_2(C_7H_4NS_2)].EtOH$, and $R[Zn(S_2CNMe_2)(C_7H_4NS_2)_2]$ (R = NBu_4), 1945–57
ZIRCONIUM
Zirconium complexes with the trifunctional 3-cyanopentane-2,4-dionate ligand, 1265–8
Interaction of nitric oxide with paramagnetic and diamagnetic alkyls of titanium, zirconium, vanadium, niobium, and tantalum, 1888–92

JOURNAL OF THE CHEMICAL SOCIETY

The scale and cost of present day publication make it necessary to ask authors to co-operate with the Society to the full. To facilitate this the Society will publish a sequence of notices to authors within these covers. It is intended to deal with all major aspects of the preparation, submission, content, and handling of articles intended for the *Journal*. Careful attention to these notices will help authors to have their work published more easily and rapidly.

NOTICES TO AUTHORS—No. 1

General Policy

The *Journal of the Chemical Society* is a medium for reporting selected original and significant contributions to new chemical knowledge. Articles which do not advance knowledge (*e.g.* reviews) will not normally be considered for publication in the *Journal*.

All contributions are judged on the criteria of (i) originality and quality of scientific content and (ii) appropriateness of the length to content of new science. Thus, papers reporting results which would be routinely predicted or result from application of standard procedures or techniques are unlikely to prove acceptable in the absence of other attributes which themselves make publication desirable.

Although short articles are acceptable, the Society strongly discourages fragmentation of a substantial body of work into a number of short publications. Unnecessary fragmentation will be a valid reason for rejection of manuscripts.

The *Journal* is published in five Transactions: Dalton, Inorganic; Perkin I, Organic and Bio-organic; Perkin II, Physical Organic; Faraday I, Physical; Faraday II, Chemical Physics.

Authors are requested to indicate, at the time they submit a typescript, the Transactions for which it is intended. Should this seem unsuitable, the Editor will inform the author.

Conditions Governing Acceptance

Contributions which have appeared or have been accepted for publication with essentially the same content in another journal or which incorporate freely available printed work will not be published in the *Journal* except by permission of the Council. This restriction does not apply to results previously published in materially abbreviated form, as a paper presented at a symposium, as a communication to *Chemical Communications*, as a letter to the Editor of other periodicals, or as a patent.

Contributions are accepted by the Society on the understanding that the authors (*a*) have obtained any necessary authority for publication, and (*b*) will, if requested, surrender their copyright to the Society.

Authors are solely responsible for the factual accuracy of their contributions.

Since the Society reserves the right to retain all typescripts sent to it, authors are advised to keep copies. When contributions have been submitted for publication the authors are not at liberty, save by permission of the Society, to withdraw or delay them or to publish them elsewhere until after publication by the Society.*

Submission of Articles

Typescripts should be addressed to: The Manager Journals, The Royal Society of Chemistry, Burlington House, London W1V 0BN.

Three copies of the typescript (a top copy and two good quality carbon or Xerox copies) are required.

Rapid publication is aided by careful preparation of text and illustrations and strict adherence to the format and conventions of individual Transactions; detailed Instructions to Authors are available on request from the Editor.

Particular attention is drawn to the use of (i) SI units and associated conventions, (ii) I.U.P.A.C. nomenclature for compounds, and (iii) standard methods of literature citation.

Administration

Receipt of a contribution for consideration will be acknowledged immediately by the Editorial Office. The acknowledgement will indicate the paper reference number assigned to the contribution. Authors are particularly asked to quote it on all subsequent correspondence.

* Attention is drawn to the following extract from the Society's Bye-Laws:

84. (i) Every Fellow who, with a view to its publication by the Society, submits a paper or other communication shall by so doing undertake:

(*a*) that his communication has not been published and that he will not permit its publication before it is accepted or declined by the Society, and

(*b*) that if it is accepted for publication the Society shall thereupon become entitled to the copyright therein and that he will, when called on to do so, assign, insofar as he is permitted to do so, to the Society the said copyright, including the sole right to print and publish in any form, in any language, and in any part of the world, the whole or any part of his communication. The Council shall not refuse any reasonable request from any author to reproduce his own work elsewhere in whole or in part.

The attention of every Fellow who submits a paper or other communication for publication shall be drawn to this Bye-Law.

(ii) Any person other than a Fellow who submits any paper or other communication with a view to its publication shall be required to sign an undertaking in the terms set out above.

Presentation of Papers

Every latitude, consistent with brevity, in the form and style of papers is permitted, and no pattern for either is prescribed. Certain elements are, however, common to all papers, and these are considered.

Organization of Material

Title.—The choice of a title for a paper is of the greatest importance, since it is from the title that the important key-words used in information retrieval are taken. Not only should the title clearly and accurately indicate the content of that paper but also it should be as specific as the content and emphasis of the work permits. Brevity in a title, though desirable, should be balanced against its accuracy and usefulness.

Abbreviations, symbols, and formulae are generally not permitted, and it is usual to spell out terms where necessary.

Reference to the preceding part of a series must be made as the reference (numbered 1) to the title in the form: 'The Chemistry of Vitamin B_{12}. Part VIII.[1] Controlled Potential Reduction of Vitamin B_{12a}.' [Reference to a preceding part in the references is in the form: Part VII, H. A. O. Hill, B. E. Mann, J. M. Pratt, and R. J. P. Williams, *J. Chem. Soc.* (*A*), 1968, 564. If the page number is unknown because the paper has still to be accepted, or is in the press, the paper number should be given.]

Summary.—Every paper for the *Journal* must be accompanied by a summary (50—250 words) setting out briefly and clearly the objects and results of the work. The summary should give a reader a clear idea of what the work has achieved and should be *independent* of the main text. This last point is of particular importance in connection with the names of compounds which, although they may be accompanied by a number which refers to a displayed formula in the body of the text, must be comprehensible without reference to this formula. Thus,

> Apetalactone, a new triterpene lactone isolated from *Calophyllum apetalum* Willd. has been shown to be 4,28-dihydroxy-3,4-secofriedelan-3-oic acid lactone (IIa).
>
> or
>
> Reaction of sodium hydride with ω-hydroxyalkyltriphenylphosphonium salts $Ph_3P^+[CH_2]_nOH\ X^-$ (I) has been investigated. The salt (I; $n = 1$, $X = 1$) gave triphenylphosphine and formaldehyde. The salt (I; $n = 2$, $X = 1$) gave triphenylphosphine oxide and ethylene. Similar reactions were carried out with ω-hydroxyalkyltriphenylarsonium (XIV) and ω-hydroxyalkyldimethylphenylammonium (XV) salts.

The summary should concern only the main subject of the work and its main conclusions; details of an involved argument or synthesis should not be included and, although classes of compounds prepared or discussed should be given rather than a list of compounds, key compounds in the work should be referred to.

Introduction.—This should give clearly and briefly, with relevant references, both the nature of the problem under investigation and its background.

Results and Discussion.—It is usual for the results to be presented first, and for them to be followed by a discussion of their significance. Only relevant results should be presented, and figures, tables, and equations should be used only for purposes of clarity and brevity. Data must not be reproduced in more than one form, *e.g.* in both figures and tables.

Experimental Section.—Descriptions of experiments should be given in detail sufficient to enable experienced experimental workers to repeat them; the degree of purity of materials should be given, as should the relative quantities used. Descriptions of established procedures are unnecessary. Standard techniques and methods used throughout the work should be stated at the beginning of the section. Apparatus should be described only if it is non-standard; commercially available instruments are referred to by their stock numbers (*e.g.* Perkin-Elmer 137 or Unicam SP 500 spectrophotometers). The accuracy of primary measurements should be stated. Unexpected hazards encountered during the experimental work should be noted. The detailed treatment of the Experimental section is dealt with in a forthcoming Notice to Authors.

Acknowledgements.—Contributors, other than co-authors, are acknowledged in a separate paragraph at the end of the paper; acknowledgements should be as brief as possible. Titles, Mr., Mrs., Miss, Dr., Professor, *etc.*, are given; degrees are not given. Organizations which operate on a commercial basis are not acknowledged.

Bibliographic References.—These are given on a separate sheet at the end of the manuscript and are referred to in the text by superior roman numerals. They must be distinguished from footnotes which are given at the bottom of the page to which they refer; they are referred to by an asterisk (*), dagger (†), *etc.* Bibliographic references and footnotes are the subject of Notice No. 3.

General Detail

Type Size.—It should be noted that since the Experimental section and the results are printed in smaller type than the theoretical part, division between the two should be clear-cut and frequent alternation is not advisable.

Brevity.—Because of the large volume of work submitted for publication, brevity in the presentation of papers is essential and, for this reason, certain tendencies are discouraged; these are as follows:

(*a*) Unnecessary division of work into separate parts of a series. Papers are in no way discouraged solely on grounds of length.
(*b*) Submission of fragmentary work when this can be included in a larger communication.
(*c*) Historical introductory paragraphs in cases when a simple statement of the accepted present position suffices.
(*d*) Undue elaboration of hypotheses.
(*e*) Over-detailed and verbose exposition of ideas.
(*f*) Excessive use of diagrams, for example, straight-line plots that can be adequately expressed as an equation together with, if necessary, a table of deviations.
(*g*) Duplication of data as between text, tables, and figures, *etc.*

(*h*) Details of the preparation of simple derivatives such as esters, ethers, semicarbazones, *etc.*, and slight variations of essentially the same technique. (Unless the conditions are critical, quantities are superfluous, and only an indication of reagents and/or conditions is required.)

Spelling.—Standard English spelling is used (*Oxford English Dictionary*), although latitude with respect to alternative spellings for certain words is allowed. Where one form or the other of a particular spelling is adopted it should be used consistently throughout a paper.

Punctuation.—Although punctuation follows standard English practice, the following conventions are observed:

(*a*) A comma is placed before ' and ' or ' or ' in a series such as ' oxygen, sulphur, and selenium ' or ' $\lambda_{max.}$ 237, 295, and 343 nm.'

(*b*) Parentheses, square brackets, and braces are used, as necessary, in that order, *i.e.* {[( )]}.

(*c*) When a word is followed by a punctuation mark the parenthetical phrase must be inserted before the latter, *e.g.* ' m.p. 234° (decomp.),' and not ' m.p. 234°, (decomp.)'.

(*d*) A colon is used to separate a ratio, as in 1 : 20 —not a solidus 1/20.

(*e*) Parenthetical expressions of the same physical quantity in different units are separated by a comma (3·9 g, 0·1 mol) (30 ml, 1 mol); expressions of different physical quantities are separated by a semicolon (2·9N; 30 ml) (*d* 0·88; 8 ml).

Hyphenation.—Hyphens are used for two purposes: to divide and to compound.

Division. It is common practice to divide words, particularly when in a sequence, when one part is common to several of the words; in such cases, the hyphen, representing the point of attachment to the common part, is always inserted, *e.g.* ' the chloro-, bromo-, and fluoro-naphthacenes,' ' the *o*-, *m*-, or *p*-nitrotoluenes,' or ' the oxo-naphthalenes and -naphthacenes.' It is not good practice, however, to detach both a common prefix and a common suffix in a series, *e.g.* ' the dihydroxy- naphthalene- and phenanthrene-diones,' since confusion can arise.

' Sections ' of class names such as diazo-ketone, alkyl-diamine, epoxy-nitro-sulphone, *etc.*, are linked by hyphens.

It is also Society usage to insert a hyphen after a prefix which ends in a vowel or y; the hydroxy-group, the aza-function, the carboxy-compounds, the nitro-derivatives, but the methyl group (note that hydroxy, acetoxy, carboxy, ethoxy, and methoxy are used and not hydroxyl, acetoxyl, carboxyl, ethoxyl, and methoxyl).

It is customary to separate a pair of the same letter when these letters (in the same fount) would not naturally fall together, *e.g.* butyl-lithium, iodo-octane.

Compounding. A hyphen is often necessary when words are compounded to form a single modifying adjective to precede the noun being modified, thus: ' a melting-point determination ' or ' a free-radical chain mechanism.' A hyphen is not needed when adverbs are compounded, as in ' an electrically heated oven,' or for two-word chemical names such as ' nitric acid solution.'

Miscellaneous uses of hyphens. Hyphens are used to set apart numbers, configurational letters, Greek letters, and italicized prefixes: 1,2,5-trimethylcyclohexane, D-*gluco*-hexose, *s*-trinitrobenzene, β-chlorophenethylbenzene, tri-μ-carbonyl-bis(tricarbonyliron), and 3-methylpent-*trans*-2-ene.

Use of Italics.—As described below, italics are indicated in a typescript by single underlining. Particular attention should be paid to the following uses.

(*a*) Foreign words and phrases and Latin abbreviations are given in italics: ***e.g.***, ***in toto***, ***in vivo***, ***ca.***, ***cf.***, ***i.e.***, ***etc.***

(*b*) In the names of chemical compounds or radicals italics are used for prefixes (other than numerals or symbols) when they define the position of named substituents, or when they define stereoisomers: other prefixes are printed in roman. (*Note:* Initial capital letters are not to be used with italic prefixes or single-letter prefixes: full points are not to be associated with letter prefixes.)

o-, *m*-, and *p*-nitrotoluenes, but *ortho*-, *meta*-, and *para*-compounds (*o*-, *m*-, and *p*- are used only with specific names; *ortho*-, *meta*-, and *para*- are used with classes), *s*-trinitrobenzene, *NN*-dimethylaniline, *trans*- and *cis*-hexane-1,2-diol, *gem*- and *vic*-diols, benzil *anti*-oxime, 3-*O*-methyl-L-*glycero*-tetrulose.

At the beginning of a sentence the first roman letter after the prefix is capitalized: ' D-*glycero*-D-*gluco*-Heptose was subjected . . . ' and ' β-*p*-Tolylchalcone gave . . . '

(*c*) The scientific names of genera, species, and varieties are italicized.

(*d*) In references to periodicals their names or abbreviations are set in italics.

Note: Greek letters are not italicized, and should not therefore be underlined in typescripts.

Headings.—(*a*) Main sections (Experimental, Discussion, *etc.*): side-heading, small capitals, no final fullstop.

(*b*) Main side-heading: italics, initial capital letter for each noun and adjective, final fullstop and dash.

(*c*) Subsidiary side-heading: italics, first initial capital only, final fullstop but no dash.

(*d*) Further subdivision: by italic (*a*), (*b*), *etc.* (no following fullstop), and finally (i), (ii), *etc.* If (a), (b), *etc.* are used in front of a subsidiary side-heading, then for contrast these letters are not italicized.

Letters and prefixes which are ordinarily printed in italics are transferred for contrast into roman type in italicized phrases (see example below, where *O*-alkyl becomes O-*alkyl*).

Physicochemical symbols, however, remain in their prescribed form, and numerals and Greek letters are not italicized.

Examples:

EXPERIMENTAL

Preparation of Aliphatic Aldoximes and Ketoximes. —Acetoxime O-*alkyl ethers.* (*a*) Acetoxime (100 g) was dissolved . . .

Density (*d*) *of the Alcohol at* 295 K.—The series of aliphatic alcohols . . .

Note: In the above examples it should be noted that the type of print required to indicate italics, capitals, small capitals, *etc.* is shown by underlining; this convention must be strictly adhered to, *i.e.*

Single underlining for *italic* type
Double underlining for SMALL CAPITALS
Treble underlining for ORDINARY CAPITALS
Wavy underlining for **bold black** type

Bibliographic References and Footnotes

A clear distinction is made between bibliographic references and footnotes. The latter are used to present material which, if included in the body of the text, would disrupt the flow of the argument but which is, nevertheless, of importance in qualifying or amplifying the textual material. Such footnotes are referred to with the following symbols: *, †, ‡, §, ¶, ‖, *etc.* [*Note:* Since an asterisk is used to indicate the author to whom correspondence should be addressed, its use early on in a paper is not advised; a dagger (†) is preferred.]

Bibliographic References.—Reference to the source of statements in the text is made by use of *superior numerals* at the appropriate place. The references themselves are given as footnotes at the bottom of the corresponding page in the final printed text. It is thus *essential* that bibliographic references are numbered in the order in which they will appear.

When citation of a paper is repeated the numeral previously given to that reference is to be used also at the second citation; the footnote is not repeated.

The position of the superior numeral should be chosen with care, particularly when it does not follow an author's name. If placed adjacent to punctuation, the numeral should normally be placed after the punctuation mark, *e.g.* 'This compound was shown to be the dienone,[3] which . . . '. It may be necessary to modify this rule, however, to avoid confusion, thus: 'In this way the method was found to be suitable for lead[2], tin[3], bismuth[4], and mercury[5].'

Particular care is necessary where a reference number is likely to be confused with a superscript numeral indicating a power index: '. . . which gave a value of 2·3 cm^3 . . . ' should be written as '. . . which gave a value[3] of 2·3 cm' or '. . . which gave a value of 2·3 cm (ref. 3)'.

Since it is usually difficult to print a table in a given position in the text, references within the table are best dealt with by taking the individual references into the printed footnotes to the tables and using a new reference number sequence therein. Should the references cited in the tables appear much earlier in the text, these earlier reference numbers may be used.

Journals. New instructions for the abbreviation of journal titles will be issued early in 1980. At the present time where authors have difficulty in deciding on a suitable journal abbreviation they are invited either to write directly to the Editors or to consult current copies of the *Journal.*

Books. Titles of books are cited in quotation marks, in upright letters, and the author(s), title, publisher, town, date (or edition, if more than one has been published), and page number (if required) must be given in that order:

C. J. M. Stirling, 'Radicals in Organic Chemistry,' Oldbourne Press, London, 1965, p. 69.

T. J. Suen, in 'Polymer Processes,' ed. C. E. Schildknecht, Interscience, New York, 1956, vol. X, p. 295.

Patents. Patents should be indicated in the form: B.P. 367,450, 367,455-7. U.S.P. 1,171,230. G.P. 436,112-4. Jap.P. 20,101. Dates are indicated thus: B.P. 666,776/1956. Patents which are applied for must always be given a year, *e.g.* B.P. Appl. 102/1968.

Reports and Bulletins, etc.

R. A. Allen, D. B. Smith, and J. E. Hiscott, 'Radioisotope Data,' UKAEA Research Group Report AERE-R 2938, H.M.S.O., London, 1961.

'Collected Papers on Methods of Analysis for Uranium and Thorium,' Geological Survey Bulletin 1006, U.S. Government Printing Office, Washington D.C., 1954.

Material presented at meetings.

N. N. Greenwood, Abstracts, Anniversary Meeting of the Chemical Society, Glasgow, 1965, C1.

N. S. Anderson and D. A. Rees, in 'Proceedings of the Vth International Seaweed Symposium,' ed. E. G. Young and J. L. McLachlan, Pergamon Press, Oxford, 1966, p. 405.

Theses.

A. D. Mount, Ph.D. Thesis, University of London, 1967.

Reference to unpublished material. For material presented at a meeting, congress, or before a society, *etc.*, but not published, the following form is used:

[1] A. R. Jones, presented in part at the XXth Congress of the International Union of Chemistry, Paris, September, 1960.

For material accepted for publication, but not yet published, the following form is used:

[2] A. R. Jones, *J. Amer. Chem. Soc.*, in the press.

If the paper has been submitted to the Society, the paper number should be given:

[3] A. R. Jones, *J. Chem. Soc.* (*A*), in the press (8/556).

For material submitted for publication but not yet accepted the following form is used:

[4] A. R. Jones, submitted for publication in *Angew. Chem.*

For personal communications the following form is used:

[5] G. B. Ball, personal communication. (*Note:* the form, G. B. Ball, private communication, is inappropriate.)

If material is to be published but has yet to be submitted the following form is used:

[6] Unpublished data.

Names.—The names and initials of all authors are always given in the reference footnote; they must not be replaced by the phrase *et al.* This does not prevent some, or all, of the names being mentioned at their first citation in the cursive text: initials are not necessary in the text.

For Chinese and Spanish authors all names should be given as in the original, since the patronymic is not always given last in these languages. If co-authors are to be collectively cited, as in 'Smith and his co-workers' or 'Smith *et al.*,' the latter form is inappropriate unless the individual name 'Smith' appears first among the authors named in the original.

Composite References.—Whenever possible, composite references should be used rather than a series of individual references. The style for composite references is as follows:

[1] A. B. Jones, *J. Chem. Soc.* (*A*), 1967, 234.

[2] A. B. Jones, *J. Chem. Soc.* (*A*), 1966, 123; 1967, 234.

[3] A. B. Jones, *J. Chem. Soc.* (*A*), 1966, 123; *J. Amer. Chem. Soc.*, 1956, **78**, 1234.

[4] A. B. Jones, *J. Chem. Soc.*, 1956, 234; A. B. Jones and C. D. Brown, *J. Chem. Soc.* (*B*), 1967, 234, 1077; 1968, 599.

[5] A. B. Jones, *J. Amer. Chem. Soc.*, 1956, **78**, 1234; A. B. Jones and C. D. Brown, *ibid.*, 1957, **79**, 567; A. B. Jones and E. F. Green, *ibid.*, p. 999.

If only one paper from a composite reference is required for citation later, then two numbers may be assigned to the first citation (*e.g.* Jones[1,2]); alternatively, long composite references may be divided by letters, *e.g.*:

(*a*) A. B. Jones, *J. Chem. Soc.* (*A*), 1954, 467; (*b*) A. B. Jones and C. D. Brown, *J. Chem. Soc.* (*B*), 1967, 234.

A. B. Jones, *J. Chem. Soc.* (*A*), (*a*) 1953, 267; (*b*) 1954, 1742; (*c*) *etc.*

A composite reference may cite a previous reference in the form:

[12] A. B. Jones, *J. Chem. Soc.*, 1956, 234; C. D. Brown, ref. 5.

(*Note: ibid.* is used only within a given reference and not to refer from one reference number to another: the abbreviated title for the journal should be repeated for separate reference numbers.)

Idem, *loc. cit.*, and *op. cit.* are not used in references.

NOTICES TO AUTHORS—No. 4/revised 1979

Journal Abbreviations

The Publications and Information Board has decided that the style of journal abbreviations to be used in The Society's publications shall in future be that defined by the Chemical Abstracts Service in CASSI.* The abbreviations listed in CASSI are based upon internationally recognised systems.

As from January 1981, the CASSI system will be the only one used in The Society's publications. The following list of CASSI-style abbreviations covers most of the journals received in The Society's library. It is not, of course, a full list; CASSI (1974 edition) plus its quarterly supplements run to more than 2000 pages.

If you cannot locate an authoritative abbreviation for a journal, and if it is not obvious how the title should be abbreviated, please cite the full title.

This change in style of abbreviations does not involve any change in the order in which the bibliographic details should be cited; they should still be given in the order: YEAR, VOLUME, PAGE.

Acc. Chem. Res.
Acta Acad. Aboensis, Ser. B
Acta Biochim. Biophys. Acad. Sci. Hung.
Acta Biochim. Iran.
Acta Biochim. Pol.
Acta Chem. Scand., Ser. A
Acta Chem. Scand., Ser. B
Acta Chim. Acad. Sci. Hung.
Acta Crystallogr.
Acta Metall.
Acta Phys. Acad. Sci. Hung.
Acta Phys. Chem.
Acta Vitaminol. Enzymol.
Adv. Act. Anal.
Adv. Alicyclic Chem.
Adv. Anal. Chem. Instrumen.
Adv. Carbohydr. Chem. Biochem.
Adv. Catal.
Adv. Chem. Phys.
Adv. Chromatogr.
Adv. Colloid Interface Sci.
Adv. Enzymol. Relat. Areas Mol. Biol.
Adv. Free-Radical Chem.
Adv. Heterocycl. Chem.
Adv. Inorg. Chem. Radiochem.
Adv. Lipid Res.
Adv. Macromol. Chem.
Adv. Magn. Reson.
Adv. Molten Salt Chem.
Adv. Organomet. Chem.
Adv. Org. Chem.
Adv. Photochem.
Adv. Phys. Org. Chem.
Adv. Protein Chem.
Adv. Quantum Chem.
Adv. Struct. Res. Diffr. Methods
Afinidad
Agric. Biol. Chem.
Agrokem. Talajtan
AIChE J.
Ambix
Am. J. Pharm.
Am. J. Sci.
An. Acad. Bras. Cienc.
Anal. Biochem.
Anal. Chem.
Anal. Chim. Acta
Anal. Lett.
Analusis
Analyst (London)
An. Bromatol.
Angew. Chem.
Angew. Chem., Int. Ed. Engl.
Angew. Makromol. Chem.
Ann. Acad. Sci. Fenn., Sect. AII, Chem.
Ann. Chim. (Paris)
Ann. Chim. (Rome)
Ann. Endocrinol.
Ann. N.Y. Acad. Sci.
Ann. Pharm. Fr.
Ann. Soc. Sci. Bruxelles
Ann. Univ. Mariae Curie-Sklodowska, Sect. AA
Annu. Rep. Anal. At. Spectrosc.
Annu. Rep. Med. Chem.
Annu. Rep. Prog. Chem., Sect. A, Phys. Inorg. Chem.
Annu. Rep. Prog. Chem., Sect. B.
Annu. Rev. Biochem.
Annu. Rev. Ind. Eng. Chem.
Annu. Rev. NMR Spectrosc.
Annu. Rev. Phys. Chem.
Appl. Spectrosc.
Arch. Pharm. Chemi, Sci. Ed.
Arch. Pharm. (Weinheim, Ger.)
Arm. Khim. Zh.
Arzneim.-Forsch.
Aspects Homogeneous Catal.
At. Absorpt. Newsl.
Aust. J. Biol. Sci.
Aust. J. Chem.
Aust. J. Phys.
Azerb. Khim. Zh.

Ber. Bunsenges. Phys. Chem.
Biochem. Biophys. Res. Commun.
Biochem. Educ.
Biochemistry
Biochemistry (Engl. Transl.)
Biochem. J.
Biochem. Pharmacol.
Biochem. Prep.
Biochem. Soc. Trans.
Biochim. Biophys. Acta
Biochimie
Biofizika
Bioinorg. Chem.
Biokhimiya
Bioorg. Chem.
Bioorg. Khim.
Biopolymers
Biotechnol. Bioeng.
Bochu-Kagaku
Boll. Soc. Ital. Biol. Sper.
Bol. Soc. Quim. Peru
Br. Corros. J.
Br. J. Pharmacol.
Br. Polym. J.
Br. Polym. J.
Bul. Inst. Politeh. Iasi.
Bull. Acad. Pol. Sci., Ser. Sci. Chim.
Bull. Acad. Sci. USSR, Div. Chem. Sci.
Bull. Chem. Soc. Jpn.
Bull. Inst. Chem. Res., Kyoto Univ.
Bull. Sci., Cons. Acad. Sci. Arts RSF Yougosl., Sect. A
Bull. Soc. Chim. Belg.
Bull. Soc. Chim. Fr.
Bunseki Kagaku

Can. J. Biochem.
Can. J. Chem.
Can. J. Chem. Eng.
Can. J. Pharm. Sci.
Can. J. Phys.
Can. J. Spectrosc.
Carbohydr. Res.
Carbon
Catal. Rev.
Cellul. Chem. Technol.
Cereal Chem.
Cesk. Farm.
Chelates Anal. Chem.
Chem. Age (London)
Chem. Anal. (Warsaw)
Chem. Ber.
Chem. Br.
Chem. Can.
Chem. Chron.
Chem. Econ. Eng. Rev.
Chem. Eng. Commun.
Chem. Eng. J. (Lausanne)
Chem. Eng. (London)
Chem. Eng. News
Chem. Eng. Progr.
Chem. Eng. Progr., Monogr. Ser.
Chem. Eng. Progr., Symp. Ser.
Chem. Eng. Sci.
Chem. Erde
Chem. Heterocycl. Compd. (Engl. Transl.)
Chem. Ind. (Duesseldorf)
Chem. Ind. Int. (Engl. Transl.)
Chem. Ind. (London)
Chem.-Ing.-Tech.
Chem. Listy
Chem. Nat. Compd. (Engl. Transl.)
Chem. N. Z.
Chem. Pharm. Bull.
Chem. Phys.
Chem. Phys. Carbon
Chem. Phys. Lett.
Chem. Phys. Lipids
Chem. Prum.
Chem. Rev.
Chemsa
Chem. Scr.
Chem. Soc. Rev.
Chem. Soc., Spec. Publ.
Chem. Stosow.
Chem. Tech. (Leipzig)
Chem. Technol.
Chem. Week
Chem. Weekbl.
Chem.-Ztg.
Chem. Zvesti
Chim. Acta Turc.
Chim. Actual.
Chimia
Chim. Ind. (Milan)
Chromatographia
Clin. Biochem.
Clin. Chem. (Winston-Salem, N. C.)
Clin. Chim. Acta
Collect. Czech. Chem. Commun.
Colloid J. USSR (Engl. Transl.)
Colloid Polym. Sci.
Combust. Flame
Commun. Fac. Sci. Univ. Ankara
Commun. R. Soc. Edinburgh, Phys. Sci.
Comput. Chem.
Coord. Chem. Rev.
Corrosion Sci.
Cosmet. Perfum.
CRC Crit. Rev. Biochem.
C.R. Hebd. Seances Acad. Sci.
Crit. Rev. Anal. Chem.
Croat. Chem. Acta
C.R. Seances Soc. Biol. Ses Fil.
Curr. Sci.

DEFAZET-Dtsch. Farben-Z.
Denki Kagaku Oyobi Kogyo Butsuri Kagaku
Dokl. Akad. Nauk Arm. SSR
Dokl. Akad. Nauk SSSR
Dokl. Bolg. Akad. Nauk
Dokl. Chem. (Engl. Transl.)
Dokl. Chem. Technol. (Engl. Transl.)
Dokl. Phys. Chem. (Engl. Transl.)
Dopo. Akad. Nauk Ukr. RSR, Ser. B
Double-Liaison
Dtsch. Lebensm.-Rundsch.
Dyn. Mass Spectrom.

Educ. Chem.
Egypt. J. Chem.
Electroanal. Chem.
Electrochim. Acta
Elektrokhimiya
Endeavour
Environ. Sci. Technol.
Erdoel Kohle, Erdgas, Petrochem. Brennst.-Chem.
Essays Biochem.
Eur. J. Biochem.
Eur. Polym. J.
Experientia

Faraday Discuss. Chem. Soc.
Faraday Symp. Chem. Soc.
FEBS Lett.
Fermentn. Spirt. Prom.
Fette, Seifen. Anstrichm.
Finn Chem. Lett.
Fiz.-Khim. Mekh. Mater.
Fiz. Met. Metalloved.
Flavour Ind.
Fluorine Chem. Rev.
Food Manuf.
Fortschr. Chem. Org. Naturst.
Fortschr. Hochpolym.-Forsch.
Fresenius Z. Anal. Chem.
Fuel

Gazz. Chim. Ital.
Gen. Cytochem. Methods
Geokhimiya
Ger. Chem. Eng. (Engl. Transl.)
Gidrokhim. Mat.
Glas. Hem. Drus., Beograd
Glass Technol.
G. Microbiol.
God. Visch. Khimikotekhnol. Inst., Sofia
Grasas Aceites (Seville)

Helv. Chim. Acta
High Energy Chem. (Engl. Transl.)
Hist. Stud. Phys. Sci.
Hoppe-Seyler's Z. Physiol. Chem.
Hua Hsueh
Hua Hsueh Hsueh Pao
Hua Hsueh Tung Pao
Hung. J. Ind. Chem.
Hwahak Kwa Kongop Ui Chinbo

Ind. Eng. Chem., Fundam.
Ind. Eng. Chem., Process. Res. Dev.
Ind. Eng. Chem., Prod. Res. Dev.
Indian J. Agric. Chem.
Indian J. Biochem. Biophys.
Indian J. Chem., Sect. A
Indian J. Chem., Sect. B.
Indian J. Pure Appl. Phys.
Ind. Lab. (Engl. Transl.)
Inorg. Chem.
Inorg. Chim. Acta
Inorg. Mater. (Engl. Transl.)
Inorg. Nucl. Chem. Lett.
Inorg. Synth.
Int. Chem. Eng.
Int. Flavours Food Addit.
Int. J. Appl. Radiat. Isot.
Int. J. Chem. Kinet.
Int. J. Mass Spectrom. Ion Phys.
Int. J. Pept. Protein Res.
Int. J. Quantum Chem.
Int. J. Quantum Chem., Symp.
Int. J. Sulfur Chem.
Int. J. Vitam. Nutr. Res.
Intra-Sci. Chem. Rep.
Ina. Chem.
Ion Exch. Solvent Extr.
Isr. J. Chem.
Istanbul Univ. Fen Fak. Mecm., Seri C
Ital. J. Biochem.

* Chemical Abstracts Service Source Index.

Itsuu Kenkyusho Nempo
Izv. Akad. Nauk Kaz. SSR, Ser. Khim.
Izv. Akad. Nauk SSSR, Neorg. Mater.
Izv. Akad. Nauk SSSR, Ser. Khim.
Izv. Akad. Nauk Turkm. SSR, Ser. Fiz.-Tekh., Khim. Geol. Nauk
Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk

J. Agric. Food Chem.
J. Am. Chem. Soc.
J. Am. Leather Chem. Assoc.
J. Am. Oil Chem. Soc.
J. Anal. Chem. USSR (Engl. Transl.)
J. Appl. Chem. Biotechnol.
J. Appl. Chem. USSR (Engl. Transl.)
J. Appl. Crystallogr.
J. Appl. Polym. Sci.
J. Assoc. Off. Anal. Chem.
J. Assoc. Public Anal.
J. Biochem. (Tokyo)
J. Biol. Chem.
J. Carbohydr., Nucleosides, Nucleotides
J. Catal.
J. Chem. Educt.
J. Chem. Eng. Data
J. Chem. Inf. Comput. Sci.
J. Chem. Phys.
J. Chem. Res. (M)
J. Chem. Res. (S)
J. Chem. Soc., Chem. Commun.
J. Chem. Soc., Dalton Trans.
J. Chem. Soc., Faraday Trans. 1
J. Chem. Soc., Faraday Trans. 2
J. Chem. Soc., Perkin Trans. 1
J. Chem. Soc., Perkin Trans. 2
J. Chem. Thermodyn.
J. Chim. Phys. Phys. Chim. Biol.
J. Chin. Chem. Soc. (Taipei)
J. Chromatogr.
J. Chromatogr. Sci.
J. Colloid Interface Sci.
J. Coord. Chem.
J. Cryst. Mol. Struct.
J. Doc.
J. Electroanal. Chem. Interfacial Electrochem.
J. Electrochem. Soc.
J. Electrochem. Soc. India
J. Fac. Sci. Univ. Tokyo
J. Fluorine Chem.
J. Food Sci.
J. Franklin Inst.
J. Gen. Chem. USSR (Engl. Transl.
J. Hazard. Mater.
J. Heterocycl. Chem.
J. Histochem. Cytochem.
J. Indian Chem. Soc.
J. Indian Inst. Sci.
J. Inorg. Nucl. Chem.
J. Inst. Brewing, London
J. Inst. Chem., Calcutta
J. Inst. Fuel
J. Labelled Comp. Radiopharm.
J. Less-Common Met.
J. Lipid Res.
J. Liq. Chromatogr.
J. Lumin.
J. Macromol. Sci., Chem.
J. Macromol. Sci., Phys.
J. Magn. Reson.
J. Med. Chem.
J. Mol. Biol.
J. Mol. Catal.
J. Mol. Spectrosc.
J. Mol. Struct.
J. Neurochem.
J. Nonmet. Semiconduct.
J. Oil Colour Chem. Assoc.
J. Organomet. Chem.
J. Org. Chem.
J. Org. Chem. USSR (Engl. Transl.)
J. Pharmacol.
J. Pharmacol. Exp. Ther.
J. Pharm. Pharmacol.
J. Pharm. Sci.
J. Photochem.
J. Phys. Chem.
J. Phys. Chem. Ref. Data
J. Phys. Chem. Solids
J. Phys. E
J. Polym. Sci., Macromol. Rev.
J. Polym. Sci., Polym. Chem. Ed.
J. Polym. Sci., Polym. Phys. Ed.
J. Polym. Sci., Polym. Symp.

J. Prakt. Chem.
J. Quant. Spectrosc. Radiat. Transfer
J. Radioanal. Chem.
J. Raman Spectrosc.
J. Res. Inst. Catal., Hokkaido Univ.
J. Res. Nat. Bur. Stand., Sect. A
J. Sci. Food Agric.
J. Sci. Hiroshima Univ., Ser. A11, Phys., Chem.
J. Sci. Ind. Res.
J. Soc. Dyers Colour.
J. Soc. Leather Technol. Chem.
J. Solid State Chem.
J. Solution Chem.
J. Steroid Biochem.
J. Struct. Chem. (Engl. Transl.)
J. Text. Inst.
J. Therm. Anal.
Justus Liebigs Ann. Chem.

Kagaku Kogaku
Kanazawa Daigaku Yakugakuhu Kenkyu Nempo
Kem. -Kemi
Kem. Tidskr.
Khim. Geterotsikl. Soedin.
Khim. Ind. (Sofia)
Khim. Neft. Mashinostr.
Khim. Prir. Soedin.
Khim. Prom. (Moscow)
Khim. Volokna
Khim. Vys. Energ.
Kinet. Catal. (Engl. Transl.)
Kinet. Katal.
Kjemi
Kobunshi Kagaku
Kogyo Kagaku Zasshi
Kolloidn. Zh.
Koord. Khim.
Kristallografiya
Kunstst. -Plast. (Solothurn, Switz.)

Lab. Pract.
Latv. PSR Zinat. Vestis, Kim. Ser.
Lipids

Macromolecules
Macromol. Synth.
Magy. Kem. Foly.
Magy. Kem. Lapja
Makromol. Chem.
Manuf. Chem. Aerosol News
Meded. Vlaam. Chem. Ver.
Mekh. Polim.
Mem. Fac. Sci. Kyushu Univ., Ser. C
Mem. Inst. Protein Res., Osaka Univ.
Mem. Inst. Sci. Ind. Res., Osaka Univ.
Mendeleev Chem. J. (Engl. Transl.)
Methods Biochem. Anal.
Methods Free-Radical Chem.
Microchem. J.
Mikrochim. Acta
Mol. Cell. Biochem.
Mol. Cryst. Liq. Cryst.
Mol. Phys.
Monatsh. Chem.

Nahrung
Nature (London)
Naturwissenschaften
Neftekhimiya
Nippon Kagaku Kaishi
Nippon Nogei Kagaku Kaishi
Nouv. J. Chim.

Oesterr. Chem. -Ztg.
Online (Weston, Conn.)
Orbital
Org. Magn. Reson.
Org. Mass Spectrom.
Org. Prep. Proced. Int.
Org. React.
Org. React. (USSR)
Org. React. Mech.
Org. Synth.

Paint Manuf.
Pak. J. Sci.
Pak. J. Sci. Ind. Res.
Pak. J. Sci. Res.
Periodia Polytech., Chem. Eng.
Pestic. Sci.
Philos. Mag.
Philos. Trans. R. Soc. London, Ser. A
Phosphorus Sulfur

Photochem. Photobiol.
Phys. Chem. Glasses
Phys. Rev.
Phys. Rev. Lett.
Phys. Scr.
Phytochemistry
Pigm. Resin Technol.
Pis'ma Zh. Eksp. Teor. Fiz.
Plast. Polym.
Pol. J. Chem.
Polym. Age
Polymer
Polym. Sci. USSR (Engl. Transl.)
Postepy Biochem.
Prikl. Biokhim. Mikrobiol.
Priroda (Moscow)
Proc. Am. Soc. Brew. Chem.
Proc. Anal. Div. Chem. Soc.
Process Biochem.
Processing
Proc. Indian Acad. Sci., Sect. A
Proc. Indian Acad. Sci., Sect. B
Proc., K. Ned. Akad. Wet., Ser B
Proc., K. Ned. Akad. Wet., Ser C
Proc. Natl. Acad. Sci., India, Sect. A
Proc. Natl. Acad. Sci. USA
Proc. R. Soc. Edinburgh, Ser. A
Proc. R. Soc. London, Ser. A
Proc. R. Soc. London, Ser. B
Proc. Soc. Exp. Biol. Med.
Prog. Bioorg. Chem.
Prog. Colloid Polym. Sci.
Prog. Inorg. Chem.
Prog. Med. Chem.
Prog. Nucleic Acid Res. Mol. Biol.
Prog. Nucl. Magn. Reson. Spectrosc.
Prog. Phys. Org. Chem.
Prog. React. Kinet.
Prog. Solid State Chem.
Prog. Stereochem.
Prog. Surf. Membr. Sci.
Prog. Surf. Sci.
Prog. Thin-Layer Chromatogr. Relat. Methods
Pritem. Chem.
Pure Appl. Chem.
Pyrethrum Post

Quad. Ing. Chim. Ital.
Quim. Nova

Radiat. Phys. Chem.
Radiat. Res.
Radiochim. Acta
Radiokhimiya
React. Kinet. Catal. Lett.
Recent Dev. Chem. Nat. Carbon Compd.
Recent Prog. Horm. Res.
Recherches
Rec. Trav. Chim. Pays-Bas
Rend. Accad. Sci. Fis. Mat., Naples
Rep. Prog. Appl. Chem.
Residue Rev.
Rev. Anal. Chem.
Rev. Asoc. Bioquim. Argent.
Rev. Chim. (Bucharest)
Rev. Phys. Chem. Jpn.
Rev. Port. Quim.
Rev. Roum. Biochim.
Rev. Roum. Chim.
Rev. Sci. Instrum.
Rev. Soc. Quim. Mex.
Ric. Sci.
Rubber Chem. Technol.
Russ. Chem. Rev. (Engl. Transl.)
Russ. J. Inorg. Chem. (Engl. Transl.)
Russ. J. Phys. Chem. (Engl. Transl.)

S. Afr. J. Chem.
Sankyo Kenkyusho Nempo
Sb. Ved. Pr., Vys. Sk. Chemickotechnol., Pardubice
Sch. Sci. Rev.
Schweiz. Apoth. -Ztg.
Sci. Cult.
Science
Sci. Pap. Coll. Gen. Educ., Univ. Tokyo
Sci. Pap. Inst. Phys. Chem. Res. (Jpn.)
Sci. Rep. Res. Inst., Tohoku Univ.
Sci. Rep. Tohoku Univ., Ser. I
Sci. Sinica
Sel. Annu. Rev. Anal. Sci.
Semicond. Insul.
Sep. Purif. Methods
Sep. Sci. Technol.

Soap. Cosmet., Chem. Spec.
Sov. Electrochem. (Engl. Transl.)
Sov. J. Bioorg. Chem. (Engl. Transl.)
Sov. J. Coord. Chem. (Engl. Transl.)
Sov. Phys. -Crystallogr. (Engl. Transl.)
Sov. Radiochem. (Engl. Transl.)
Spectrochim. Acta, Part A
Spectrochim. Acta, Part B
Spectrosc. Lett.
Steroids
Steroids Lipids Res.
Struct. Bonding (Berlin)
Stud. Univ. Babes-Bolyai, Ser. Chem.
Sub-Cell. Biochem.
Surf. Colloid Sci.
Surf. Sci.
Synth. Commun.
Synthesis
Synth. Proced. Nucleic Acid Chem.
Synth. React. Inorg. Metal-Org. Chem.

Tachan Hwakak Hoechi
Talanta
Technol. Rep. Osaka Univ.
Teor. Eksp. Khim.
Teor. Osn. Khim. Tekhnol.
Tetrahedron
Tetrahedron Lett.
Text. Inst. Ind.
Text. Res. J.
Theor. Exp. Chem. (Engl. Transl.)
Thermochim. Acta
Tin Its Uses
Tokyo Kogyo Shikensho Hokoku
Top. Curr. Chem.
Top. Stereochem.
Trans. Inst. Chem. Eng.
Trans. Inst. Met. Finish.
Transition Met. Chem.
Trans. J. Br. Ceram. Soc.
Trends Biochem. Sci.
Tr. Inst. Elektrokhim., Ural. Nauchn. Tsentr. Akad. Nauk SSSR

Ukr. Biokhim. Zh.
Ukr. Khim. Zh. (Russ. Ed.)
Usp. Khim.
UV Spectrom. Group Bull.
Uzb. Khim. Zh.

Vestn. Leningr. Univ., Fiz., Khim.
Vestn. Mosk. Univ., Khim.
Vestn. Slov. Kem. Drus.
Vestsi Akad. Navuk B, SSR. Ser. Khim. Navuk
Veszpremi Vegyip. Egy. Kozl.
Vitam. Horm. (N.Y.)
Vopr. Med. Khim.
Vysokomol. Soedin., Ser. A
Vysokomol. Soedin., Ser. B

Xenobiotica

Yakugaku Zasshi
Yuki Gosei Kagaku Kyokai Shi

Z. Anorg. Allg. Chem.
Zavod. Lab.
Zb. Pr. Chemickotechnol. Fac. SVST Z. Chem.
Zentralbl. Pharm., Pharmakother. Laboratoriumsdiagn.
Zh. Anal. Khim.
Zh. Eksp. Teor. Fiz.
Zh. Evol. Biokhim. Fiziol.
Zh. Fiz. Khim.
Zh. Nauchn. Prikl. Fotogr. Kinematogr.
Zh. Neorg. Khim.
Zh. Obshch. Khim.
Zh. Org. Khim.
Zh. Prikl. Khim.
Zh. Prikl. Spektrosk.
Zh. Strukt. Khim.
Zh. Vses. Khim. Ova.
Z. Kristallogr., Kristallgeom., Kristallphys., Kristallchem.
Z. Lebensm. -Unters. Forsch.
Z. Naturforsch., Teil A
Z. Naturforsch., Teil B
Z. Naturforsch., Teil C
Z. Phys. Chem. (Frankfurt am Main)
Z. Phys. Chem. (Leipzig)
Z. Vitam., Horm., Fermentforsch.
Z. Wiss. Photogr., Photophys., Photochem.

NOTICES TO AUTHORS—No. 5/1969

The International System of Units (SI)

Preamble

For many years the practice of The Society in respect of units has been based on the recommendations of a joint Committee of The Royal Society, The Chemical Society, The Faraday Society, and The Physical Society. The 1951 set of recommendations published by that Committee formed the basis of Chapter 7 of the ' Handbook for Chemical Society Authors ' but since their promulgation much effort has been expended in international circles to devise and approve a basic set of coherent units. This having been completed, The Joint Symbols Committee of The Royal Society, of which The Chemical Society is a participating member, has produced a completely new set of recommendations in a pamphlet ' Symbols, Signs and Abbreviations ' 1969 (copies of this pamphlet or further details can be obtained from the Managing Editor, The Chemical Society, Burlington House, London, W1V OBN). The basis of the new recommendations is the ' Système International d'Unités ' (to be abbreviated to SI, in all languages).

The advantages offered by SI are as follows.

(i) It is a truly coherent system, *i.e.* the product or quotient of any two unit quantities in the system is the unit of the resultant quantity. This contrasts with the previous situation where, even in metric systems used within the same discipline, many additional units are arbitrarily and sometimes differently defined.

(ii) SI derives nearly all the quantities needed in all sciences and technologies from a very small set of base-units.

(iii) The variety of multiples and sub-multiples in common use is minimized.

(iv) A more uniform presentation can be ensured.

(v) Presentation is such that the relation of any derived unit, or multiple or sub-multiple of a derived unit, to the coherent unit is always obvious and simple.

Policy

(1) The Society announces its approval and support of SI, and its intention that SI shall become the preferred system in its publications.

(2) *Guidelines for the publications of the Society.* The Society realises that public acceptance of this system will be more a matter of education and tolerance than of dictatorial action. It nevertheless desires that the SI system and units compatible with it shall *rapidly* become the established standard in the Society's publications. An author will not be denied any reasonable usage, but if non-SI units are used for critical data or for quantities measured to a high order of accuracy (as opposed to the rough physical conditions of an experiment), the definitive values will be expressed in SI units as well.

The following will be the guidelines used:

(*a*) A metric system will always be used in preference to a non-metric one.

(*b*) The SI system will be the standard usage.

(*c*) The units used to record the *definitive* values of ' critical data ' or quantities measured to high degree of accuracy will be of the SI system.

(*d*) When non-SI units are used they must be adequately explained unless their definition is obvious (*e.g.* degree Celsius, mmHg, g, h). The derivation of derived non-SI units will be indicated.

(*e*) Equations involving electrical quantities should normally be those appropriate for use with SI (rationalized m.k.s) units. If authors wish to use equations suitable for e.s.u. or e.m.u. the lack of consistency with SI units must be explicitly noted.

(3) *The principal changes.* There are four of these:

(*a*) Basic units: the metre and the kilogramme replace the centimetre and the gramme of the old metric system.

(*b*) The unit of force is now the newton (kg m s^{-2}).

(*c*) The unit of energy is the joule and of power the joule per second (watt); thus the variously defined calories and non-metric units of energy and power are superseded.

(*d*) ' Electrostatic ' and electromagnetic ' units are replaced by SI electrical units.

Detail

(4) *Definition.* A quantity is expressed as the product of a numerical value and a unit.

(5) *The System.* The fully coherent SI consists of base-units, supplementary units, derived units, and decimal multiples and sub-multiples of these units, formed by use of prefixes only.

(6) *Coherent systems.* A coherent system is one based on a selected set of ' base-units ' from which ' derived units ' are obtained by multiplication without introducing numerical factors.

(7) *Base-units.* The name International System of Units (SI) was adopted by the Conférence Générale de Poids et Mesures in 1960 for the coherent system now based on the base-units given in Table 1.

TABLE 1

Physical quantity	*Name of base-unit*	*Symbol for unit*
length	metre	m
mass	kilogramme	kg
time	second	s
electrical current	ampere	A
thermodynamic temperature	kelvin	K
luminous intensity	candela	cd
amount of substance	mole	mol

(8) *Supplementary units.* The SI also includes two ' supplementary ' *dimensionless* units as follows:

Physical quantity	*Name of unit*	*Symbol for unit*
plane angle	radian	rad
solid angle	steradian	sr

(9) *Multiples and sub-multiples.* In the SI there is one and only one basic unit for each physical quantity. Decimal fractions and multiples of these basic units may, however, be constructed by use of certain prefixes (see Table 2). They may also be used with derived SI units.

TABLE 2

Fraction	*Prefix*	*Symbol*	*Multiple*	*Prefix*	*Symbol*
10^{-1}	deci	d	10	deka	da
10^{-2}	centi	c	10^{2}	hecto	h
10^{-3}	milli	m	10^{3}	kilo	k
10^{-6}	micro	μ	10^{6}	mega	M
10^{-9}	nano	n	10^{9}	giga	G
10^{-12}	pico	p	10^{12}	tera	T
10^{-15}	femto	f			
10^{-18}	atto	a			

The combination of a prefix and a unit symbol constitutes a new single unit symbol; compounding of prefixes is not permitted.

Although it will not always be possible, particularly in Tables, the general principle should be to choose a unit (*i.e.* including multiple or sub-multiple) such that the resulting numerical value is between 0·1 and 1000.

(10) *Derived units.* Some derived units have special names and symbols, and these are given in Table 3.

TABLE 3

Physical quantity	*Name of SI unit*	*Symbol for SI unit*	*Definition of SI unit*
energy	joule	J	$kg\ m^2\ s^{-2}$
force	newton	N	$kg\ m\ s^{-2} = J\ m^{-1}$
power	watt	W	$kg\ m^2\ s^{-3} = J\ s^{-1}$
electric charge	coulomb	C	A s
electric potential difference	volt	V	$kg\ m^2\ s^{-3}A^{-1} = JA^{-1}s^{-1}$
electric resistance	ohm	Ω	$kg\ m^2\ s^{-3}A^{-2} = VA^{-1}$
electric capacitance	farad	F	$A^2\ s^4\ kg^{-1}\ m^{-2} = As\ V^{-1}$
magnetic flux	weber	Wb	$kg\ m^2\ s^{-2}A^{-1} = V\ s$
inductance	henry	H	$kg\ m^2\ s^{-2}A^{-2} = VA^{-1}\ s$
magnetic flux density	tesla	T	$kg\ s^{-2}A^{-1} = V\ s\ m^{-2}$
luminous flux	lumen	lm	cd sr
illumination	lux	lx	$cd\ sr\ m^{-2}$
frequency	hertz	Hz	s^{-1}

Others do not

Physical quantity	*SI unit*	*Symbol for SI unit*
area	square metre	m^2
volume	cubic metre	m^3
density	kilogramme per cubic metre	$kg\ m^{-3}$
velocity	metre per second	$m\ s^{-1}$
angular velocity	radian per second	$rad\ s^{-1}$
acceleration	metre per second squared	$m\ s^{-2}$
pressure	newton per square metre	$N\ m^{-2}$
kinematic viscosity, diffusion coefficient	square metre per second	$m^2\ s^{-1}$
dynamic viscosity	newton second per square metre	$N\ s\ m^{-2}$
electric field strength	volt per metre	$V m^{-1}$
magnetic field strength	ampere per metre	$A\ m^{-1}$
luminance	candela per square metre	$cd\ m^{-2}$

(11) *Symbol.* The symbol for a unit will be printed in roman (upright) type, remains unaltered in the plural and does *not* take a full point, *i.e.* 5 cm not 5 cm. or 5 cms or 5 cms.

The symbol will be separated from the numerical value by a thin space.

(12) *Decimal fractions and multiples of SI units having special names.* These names are not part of the SI, but for the time being their use in The Society's publications may continue. The list given in Table 4 is not exhaustive.

TABLE 4

Physical quantity	*Name of unit*	*Symbol unit*	*Definition of unit*
length	ångström	Å	$10^{-10}\ m = 10^{-1}\ nm$
length	micron	μm	$10^{-6}\ m$
area	barn	b	$10^{-28}\ m^2$
volume	litre	l	$10^{-3}\ m^3 = dm^3$
mass	tonne	t	$10^3\ kg = Mg$
force	dyne	dyn	$10^{-5}\ N$
pressure	bar	bar	$10^5\ N\ m^{-2}$
pressure	pascal	Pa	Nm^{-2}
energy	erg	erg	$10^{-7}\ J$
kinematic viscosity diffusion coefficient	stokes	St	$10^{-4}\ m^2\ s^{-1}$
dynamic viscosity	poise	P	$10^{-1}\ kg\ m^{-1}\ s^{-1}$
magnetic flux	maxwell	Mx	$10^{-8}\ Wb$
magnetic flux density (magnetic induction)	gauss	G	$10^{-4}\ T$
conductance	siemens	S	Ω^{-1}

(13) *Units defined in terms of the best available experimental values of certain physical constants.* These units are not part of the SI. The factors for conversion of these units to SI units are subject to change in the light of new experimental measurements of the constants involved. Their use outside the restricted contexts to which they are appropriate should be discouraged. The following list is not exhaustive.

Physical quantity	*Name of unit*	*Symbol for unit*	*Conversion factor*
energy	electronvolt	eV	$eV \approx 1{\cdot}6021 \times 10^{-19}\ J$
mass	unified atomic mass unit	u	$u \approx 1{\cdot}660\,41 \times 10^{-27}\ kg$

(14) *Other units now exactly defined in terms of the SI units.* These units are not part of the SI. It is recognized that their use may be continued for some time but it is recommended that except in special circumstances they should be progressively abandoned in conformity with international recommendations. The list given in Table 5 is by no means exhaustive. Each of the definitions given in the fourth column is *exact.*

TABLE 5

Physical quantity	*Name of unit*	*Symbol for unit*	*Definition of unit*
length	inch	in	$2{\cdot}54 \times 10^{-2}\ m$
mass	pound (avoirdupois)	lb	0·453 592 37 kg
time *	minute	min	60 s
time *	hour	h	3600 s
force	kilogramme-force	kgf	9·806 65 N
force	pound-force	lbf	9·806 65 × 0·453 592 37 N
pressure	atmosphere	atm	$101\,325\ N\ m^2$
pressure	conventional millimetre of mercury	mmHg	$13{\cdot}5951 \times 9{\cdot}806\,65\ N\ m^{-2}$
pressure	torr	Torr	$(101\,325/760)\ N\ m^{-2}$
pressure	pound-force per square inch	$lbf\ in^{-2}$	$\frac{9{\cdot}806\,65 \times 4535{\cdot}9237}{6{\cdot}4516}\ N\ m^{-2}$
energy	kilowatt hour	kW h	$3{\cdot}6 \times 10^6\ J$
energy	thermochemical calorie	cal(thermochem.)	4·184 J
energy	I.T. calorie	cal_{IT}	4·1868 J
thermodynamic temperature	degree Rankine	°R	(5/9) K
radioactivity	curie	Ci	$3{\cdot}7 \times 10^{10}\ s^{-1}$

* Use of other common units (min, h, day) may continue in normal expressions of intervals of time.

Formulae and Figures

The purpose of all illustrative matter in a paper is to clarify the arguments and descriptions rather than to duplicate them. The Society strongly encourages the use of displayed formulae, particularly in the form of schemes where the details of a reaction sequence are often more easily understood when illustrated than when described in the text.

All formulae and figures should be clearly drawn, and in the case of figures provided with captions; the latter should be typed on a separate sheet. Since all formulae carry a key number by which they are identified, unless they form part of the running text or unless they are part of a scheme which itself has a caption, they are not generally further described. Blocks of formulae do not need a caption.

Illustrative matter is divided, for technical reasons, into figures and formulae, although in many cases (*e.g.* crystal structures which may be regarded as formulae but which are treated as figures) these divisions overlap.

Structural Formulae.—(*a*) Only those formulae which are displayed may be given key numbers. In all other cases the compounds concerned are referred to by name only.

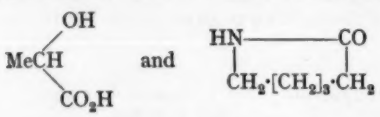
(*b*) Formulae are numbered sequentially with bold arabic numerals in parentheses [(**1**), (**2**), and (**3**) *etc.*] as they are displayed and *not* as they are mentioned in the text.

(*c*) In complex reaction schemes the formulae should be numbered serially following the reaction sequence. Non-sequential numbering in a collection of formulae can render it hard to locate an individual number.

(*d*) Structural or displayed formulae must be carefully and accurately drawn or typed on a separate sheet, rather than inserted into the text, although a marginal indication of where they are to go in the text is desirable.

(*e*) Formulae inserted into the body of the text (as distinct from those displayed separately) should be written on one line if possible, *e.g.*

$HO{\cdot}CHMe{\cdot}CO_2H$ and $\overline{NH{\cdot}[CH_2]_5{\cdot}CO}$ rather than



(*f*) Points (which may be typed as full stops) are used to indicate bonds between the atoms of the backbone chain of a compound. The symbol of each element of that chain is preceded by a full stop (or colon for a double bond) and followed by the symbols or formulae of the atoms or groups that are attached to it (parentheses being used where necessary to enclose compound groups), *e.g.* *o*-$HO{\cdot}C_6H_4{\cdot}CH_2{\cdot}NH_2$ and $CH_2Cl{\cdot}CH(OH){\cdot}CO_2H$.

Groups that are indicated by a single symbol (*e.g.* Me and Et *etc.*) do not need use of such full stops.

Repeating sequences of a backbone composite group are enclosed with square brackets and their number is indicated by an inferior multiplier, *e.g.* $HO{\cdot}[CH_2]_4{\cdot}NH_2$, but $HO{\cdot}[CH_2]_4{\cdot}N(CH_2{\cdot}OH)_2$.

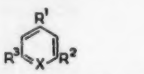
(*g*) The use of large circles to represent six delocalized π-electrons in cyclic systems (with or without positive or negative signs as appropriate) is permitted in certain circumstances. Cyclic systems with more or less than six delocalized π-electrons may be represented by formulae containing dotted lines. Both topics are dealt with in *Proceedings*, 1959, 75.

(*h*) Customary steric conventions must be observed, notably for steroids, triterpenes, and carbohydrates. The Society uses wedges (◢) or heavy lines (—) rather than blocked circles (●) and broken lines in the form – – – – – rather than ⁞||.

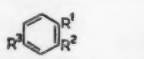
(*i*) The symbols Me, Et, Pr^n, Pr^i, Bu^n, Bu^i, Bu^s, Bu^t, Ph, Ac, Bz (the symbol for PhCO and not for $PhCH_2$), Alk, Ar, and Hal, should be used but may be written in full when the groups are involved in the reaction described. Other special symbols, if used, require an explanatory footnote. The carboxy-group is written CO_2H (*not* COOH) and similarly CO_2R.

(*j*) One variable univalent substituent is indicated by R; when more than one independently variable general substituent is present, R^1, R^2, and R^3 should be used (*not* R, R^1, R^2, R^3; or R_1, R_2, and R_3 which indicate 1 × R and multiples of R thereof).

(*k*) Often it is desirable to use one formula to represent a number of related compounds (or classes of compounds) by the use of one or more independently variable substituents. It is preferable to give each compound thus represented a separate key number rather than to subdivide individual key numbers by alphabetical suffixes [*i.e.* (**1a**), (**1b**), (**1c**) *etc.*].



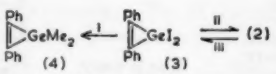
(**1**) $R^1 = R^2 = Ph$, $R^3 = Me$, X = O
(**2**) $R^1 = Me$, $R^2 = R^3 = Ph$, X = S



(**3**) $R^1 = Me$, $R^2 = Ph$, $R^3 = Bz$
(**4**) $R^1R^2 = CO{\cdot}O{\cdot}CO$, $R^3 = Ph$

The use of more than four independently variable substituents or atoms on one generalized formula is discouraged.

(*l*) Once a formula has been displayed it is permissible to employ its key number in later reaction schemes or equations rather than to re-display the formula:



Reagents: i, MeMgI; ii, NaOH; iii, HI

It should be noted that reagents and reaction conditions are given as footnotes to the scheme for economy of space; if present, an equation number is set as far to the right as possible, and if there is likelihood of

confusion with compound key-numbers it is accompanied by the word equation.

(*m*) Displayed formulae, unless they are capable of being typed on one line [see point (*e*) above], should not be included in tables; they should be displayed before the table with a key number for each compound and this should be used in the table.

(*n*) The key number for a compound may be used in the cursive text to avoid repetition of long chemical names; this device must not be used to excess. In general it is preferred if the key number is qualified by a partial name for the compound as in the following example:

'Pyolin (**1**) was oxidized by permanganate to the oxo-acid (**2**), the methyl ester (**3**) of which with methylmagnesium iodide gave the normal product (**4**)'.

(*o*) Reference to compounds in the Summary by key number alone is not allowed since a summary should be comprehensible without reference to the body of the paper itself. The reference number should, however, accompany the name of the compound to which it refers.

Figures.—(*a*) Figures must bear on the back the names of the authors, the title of the paper (abbreviated if necessary), and the number of the figure.

(*b*) Figures must be in Indian ink, on Bristol board, white smooth cartridge paper, tracing linen, plastic film (it is essential that the special plastic ink developed for this is used), or graph paper with *faint* blue lines (red or brown lines must not be present as these may be reproduced by the photographic process of block making). Since lines must be black and sharp, photostats or similar prints are often not suitable. If paper is used, it must be strong enough to withstand repeated handling.

(*c*) Lettering and numerals must be in *blue pencil* (*not* red or black pencil or ink) clearly legible but not so heavily scored as to make a permanent impression on the paper or board.

(*d*) When the figures are large (more than 8 in × 10 in), smaller copies (which may be rough, as long as they are clear) should be supplied for submission to the referees; editing will not be undertaken, however, before the final figures are received.

(*e*) Figures must be carefully drawn, preferably three times the size (linear) that seems necessary to ensure sharp printing, but excessive reduction is costly and illustrations that exceed five times the size of the finished block may be returned to the author for redrawing.

(*f*) Two-inch margins are essential all round figures. Lettering for insertion at margins should be placed well clear of the ordinate or abscissa line so that it can be copied before erasure.

Lettering and touching-up are done by the Society and clarity of instructions is essential. When there is much lettering, or complicated lettering, and always when tracing linen or plastic film is used, a rough tracing should be added with the lettering shown in ink.

(*g*) Since, for printing, the size is reduced, lines should not be too thin. Given lines must be of even thickness, angles neat, and curves smooth.

(*h*) Graphs should have only the requisite minimum of the scale (not less than three points) marked by numerals, and the scale lines should not normally be continued into the body of the figure.

(*i*) Graphs in any one paper should, when convenient, be drawn to the same scale, and scale markings should, when possible, be identical so that the graphs may be placed adjacent on the page. Contrariwise, two curves drawn to different scales can be shown on one graph by having the appropriate scales on the left-hand and the right-hand side. The use of both right- and left-hand axes and top and bottom axes on figures which have quantitative significance is encouraged.

(*j*) Experimental points must be shown sufficiently large to be distinguishable when reduced in size. Whenever possible, they should be confined to open and closed circles, crosses, squares, and triangles. Partly black circles and similar signs frequently become indistinguishable in print.

(*k*) Curves may be distinguished as full lines (——), broken (– – – –) or dotted lines (· · · ·), and dot-dash lines (— · — · —); further differentiation should normally be achieved by labelling the curves, which is, in any case, desirable.

(*l*) For reference in legends, it is preferable to mark curves A, B, C, *etc.* rather than to reproduce the type of line in print.

(*m*) There must be no unnecessary waste space, *e.g.* around curves; ordinates and abscissae should start at zero only if the curve extends to that range. Enlargement of parts of a figure can occasionally be placed in a corner of the complete figure.

(*n*) It is not advisable to insert much or complicated lettering on curves or in blank spaces; mistakes (in copying by the artist) can rarely be rectified once the block is made. It is better to label the curves A, B, C, *etc.* and to use explanatory legends.

(*o*) *Large* solid objects should be represented by hatching rather than by black surfaces, otherwise the ink may smear on printing.

(*p*) Photographs are reproduced by a half-tone process on art paper. The prints supplied must be very clear and of good contrast, as considerable definition may be lost in reproduction.

(*q*) Captions and explanatory legends, to be set by the printer should be typed on a separate page attached to the manuscript, and not given on the figure itself.

(*r*) Figures are numbered consecutively Figure 1, Figure 2, *etc.* (in arabic numerals). Photographs (half-tone reproduction) are numbered consecutively Plate 1, Plate 2, *etc.* but these numbers are independent of the numbering of any figures.

(*s*) Since figures represent an uneconomical use of space their number and size should be kept to a minimum. Figures and tables for the same values are discouraged.

NOTICES TO AUTHORS—No. 7/1970 (revised 1976)

Deposition of Data—Supplementary Publications Scheme

Preamble

The growing volume of research that produces large quantities of data, the increasing facilities for analysing such data mechanically, and the rising cost of printing are all making it very difficult to publish in the *Journal* in the normal way the full details of the experimental data which become available. Moreover, whilst there is a large audience for the general method and conclusions of a research project, the number of scientists interested in the details, and in particular in the data, of any particular case may be quite small. The British Library, Lending Division (B.L.L.D.) in consultation with the Editors of scientific journals, has now developed a scheme whereby such data and detail may be stored and then copies made available on request at the B.L.L.D., Boston Spa. The Chemical Society is a sponsor of this scheme and has indicated to the B.L.L.D. its wish to use the facilities being made available in this ' Supplementary Publications Scheme '.

Bulk information (such as crystallographic structure factor tables, computer programmes and output, evidence for amino-acid sequences, spectra, *etc.*), which accompanies papers published in future issues of the Chemical Society's *Journal* may in future be deposited, free of charge, with the Supplementary Publications Scheme, either at the request of the author and with the approval of the referees or on the recommendation of referees and with the approval of the author.

The Scheme

Under this scheme, authors will submit articles and the supplementary material to the *Journal* simultaneously in the normal way, and both will be refereed. If the paper is accepted for publication the supplementary material will be sent by the Society to the B.L.L.D. where it will be stored. Copies will be obtainable by individuals both in the U.K. and abroad on quoting a supplementary publication number that will appear in the parent article.

Preparation of Material

Authors will be responsible for the preparation of camera-ready copy according to the following specifications (although the Society will be prepared to help in case of difficulty).

(*a*) Optimum page size for text or tables in typescript: up to 30 cm × 21 cm.
(*b*) Limiting page size for text or tables in typescript: 33 cm × 24 cm.
(*c*) Limiting size for diagrams, graphs, spectra, *etc.*: 39 cm × 28.5 cm.
(*d*) Tabular matter should be headed descriptively on the first page, with column headings recurring on each page.
(*e*) Pages should be clearly numbered.

It is recommended that all material which is to be deposited should be accompanied by some prefatory text. Normally this will be the summary from the parent paper and authors will greatly aid the deposition of the material if a duplicate copy of the summary is provided. If authors have the facilities available the use of a type face designed to be read by computers is encouraged.

Deposition

The Society will be responsible for the deposition of the material with the B.L.L.D. The B.L.L.D. will not receive material direct from authors since the Library wishes to ensure that the material has been properly and adequately refereed.

Action by the Society

The Society will receive a manuscript for publication together with any supplementary material for deposition and will circulate all of this to referees in the normal way. When the edited manuscript is sent to the printers the supplementary material will be sent for deposition to the B.L.L.D. The Society will add to the paper a footnote indicating what material has been deposited in the Supplementary Publications Scheme, the supplementary publication number, and details as to how copies may be obtained.

Availability

Copies of Supplementary Publications may be obtained from the B.L.L.D. on demand by organizations which are registered borrowers. They should use the normal forms and coupons for such requests addressing them as follows:

Mr. J. P. Chillag,
British Library Lending Division,
Boston Spa,
Wetherby,
West Yorkshire, LS23 7BQ, U.K.

Non-registered users may also obtain copies of Supplementary Publications but should first apply for price quotations. These are available from the Loans Office at the above address.

International Collaboration

A similar scheme (known as the National Auxiliary Publications Service) is being operated in the U.S.A. by the American Society for Information Science. Similar schemes are also being contemplated in other countries. The provision of reciprocal arrangements for the exchange of supplementary data between the various national deposition centres is being investigated.

NOTICES TO AUTHORS—No. 8/1970

X-Ray Crystallographic Structure Factor Tables

The Society has recently taken advice from the members of its Chemical Crystallography Group and as a result of this and of the inception of the National Lending Library Supplementary Publications Scheme (discussed in Notices to Authors No. 7) the following rules are being taken into use forthwith to govern the publication or deposition of *X*-ray crystallographic structure factor tables.

(i) The Society will no longer publish tables of structure factors in its publications except in accordance with the provision of paragraph (iv) below.

(ii) All authors of crystallography papers will submit along with the manuscript a readable table of such structure factors for the referees' inspection. The table should be prepared in accordance with the detail given in paragraph 3 of Notices to Authors No. 7 so that it may be used for deposition. Computer printout may be used providing that it is top copy in good contrast (see note).

(iii) If the referees accept the paper and its associated structure factor tables then the Society will deposit these structure factor tables in the National Lending Library Supplementary Publications Scheme (see Notices to Authors No. 7) and will publish as a footnote to the paper the necessary details that will enable any reader to obtain a copy in microfiche or an electrophotographic printoff of the data tables associated with the paper.

(iv) Authors, or the referees, may request publication of such tables of structure factors, *in extenso*, in cases that seem to them to be desirable. It is expected that this will occur only rarely.

(v) The details of the National Lending Library Supplementary Publications Scheme and the methods for obtaining photographic printoff of material deposited with that scheme are given in Notices to Authors No. 7.

Note to paragraph (ii). Structure factors tables prepared from computer printout must be presented in the form indicated in paragraph 3 of Notices to Authors No. 7 and must be arranged with the greatest economy of space possible [*i.e.* not less than two groups of columns (h, k, l, F_c, F_o) to the page (30 cm × 21 cm)]. All columns must be headed. A ' paste-up ' on white card of computer printout will be acceptable providing the quality of the printout is adequate.

NOTICE TO AUTHORS—No. 9/1974

Nomenclature

For many years the Society has actively encouraged the use of standard I.U.P.A.C. nomenclature and symbolism in its publications as an aid to the accurate and unambiguous communication of chemical information between authors and readers. Although the I.U.P.A.C. rules for naming organic compounds have now gained wide acceptance amongst chemists, mainly because they have been in existence for a number of years, those for naming inorganic compounds are of more recent origin and for this reason their acceptance is less general.

In order to encourage authors to use I.U.P.A.C. nomenclature rules when drafting papers, attention is drawn to the following publications in which both the rules themselves and guidance on their use are given.

'Nomenclature of Organic Chemistry, Sections A, B, and C,' Butterworths, London, 2nd Edition, 1971.

'Nomenclature of Inorganic Chemistry,' Butterworths, London, 1971.

'Manual of Symbols and Terminology for Physicochemical Quantities and Units,' Butterworths, London, 1970.

In addition to the above publications, provisional rules for the naming of organometallic compounds, amino-acids, carbohydrates, carotenoids, and steroids, and rules of stereochemistry are available from the:

I.U.P.A.C. Secretariat,
Bank Court Chambers,
2—3 Pound Way,
Cowley Centre,
OXFORD OX4 3YF.

It is recommended that where there are no I.U.P.A.C. rules for the naming of particular compounds or authors find difficulty in applying the existing rules, they should seek the advice of the Society's editorial staff.

NOTICE TO AUTHORS—No. 10/1976

Authentication of New Compounds

(1) It is the responsibility of authors to provide fully convincing evidence for the homogeneity and identity of all compounds they claim as new. Evidence of both purity and identity is required to establish that the properties and constants reported are those of the compound with the new structure claimed.

(2) In the context of this Notice a compound is considered as new (*a*) if it has not been prepared before, (*b*) if it has been prepared before but not adequately purified, (*c*) if it has been purified but not adequately characterised, (*d*) if, earlier, it has been assigned an erroneous constitution, or (*e*) if it is a natural product synthesised for the first time. In preliminary communications compounds are often recorded with limited characterising data; in spite of (*c*) above later preparations of such compounds are not considered as new if the properties previously reported are confirmed; the same applies to patents.*

(3) Referees are asked to assess, as a whole, the evidence in support of the homogeneity and structure of all new compounds. No hard and fast rules can be laid down to cover all types of compounds, but the Society's policy remains unchanged in that evidence for the unequivocal identification of new compounds should normally include good elemental analytical data; an accurate mass measurement of a molecular ion does not provide evidence of purity of a compound and must be accompanied by independent evidence of homogeneity. Low-resolution mass spectroscopy must be treated with even more reserve in the absence of firm evidence to distinguish between alternative molecular formulae. Where elemental analytical data are not available, appropriate evidence which is convincing to an expert in the field will be acceptable, but authors should include, for the referees, a brief explanation of the special nature of their problem.

(4) Spectroscopic information necessary to the assignment of structure should normally be given. Just how complete this information should be must depend upon the circumstances; the structure of a compound obtained from an unusual reaction or isolated from a natural source needs much stronger supporting evidence than one derived by a standard reaction from a precursor of undisputed structure. Authors are reminded that full spectroscopic assignments may always be treated as a Supplementary Publication where their importance does not justify their inclusion in the published paper.

(5) Finally, referees are reminded of the need to be exacting in their standards but at the same time flexible in their admission of evidence. It remains the Society's policy to accept work only of high quality and to permit no lowering of present standards.

* New compounds should be indicated by underlining the name (for italics) at its first mention (excluding headings) in the Experimental section only, and by giving analytical results in the form: (Found: C, 63.1; H, 5.4. $C_{13}H_{12}NO_4$ requires C, 63.2; H, 5.3%). If analytical results for compounds which have been adequately described in the literature are to be included, they should be given in the form: (Found: 62.95; H, 5.4. Calc. for $C_{13}H_{12}NO_4$: C, 63.2; H, 5.3%). Analyses are normally quoted to the nearest 0.05%.

NOTICE TO AUTHORS—No. 11/1976

Publication of *X*-Ray Crystallographic Work in the *Journal*

Preamble

At a meeting of the Primary Journals Committee held in October 1975 a sub-committee was set up to consider policy with regard to publication in the *Journal* of both preliminary communications and substantive papers concerned with *X*-ray crystallographic work. This step was taken in the light of correspondence received by the Society which indicated concern by many referees on the problems created by the large number of routine *X*-ray crystallographic studies submitted to the Society as a result of the increasing ease of carrying out such work.

Since the sub-committee's terms of reference were wide it was able to consider both this problem and others relating to publication of *X*-ray crystallographic work in all sections of the *Journal*. Its recommendations which are outlined below fall into two groups: those concerned with preliminary communications and those with full papers. These recommendations have been endorsed by the Primary Journals Committee and now represent the Society's policy with regard to crystallographic work submitted for publication in its primary journals.

Preliminary Communications

(1) Evidence was presented to the sub-committee that a major problem associated with the publication of preliminary reports of crystallographic work in *J.C.S. Chem. Comm.* arose as a result of the non-availability to interested readers of the atomic co-ordinates associated with this work. Although in the normal course of events such data would be expected to appear in the follow-up paper, many cases were cited where the period between publication of the preliminary report and the substantive paper was many years or the full papers never appeared in print. The evidence presented suggested that there was considerable disquiet among crystallographers at this state of affairs. In an attempt to improve this situation and after consultation with the Cambridge Crystallographic Data Centre (C.C.D.C.) the Society has resolved to press authors of preliminary reports of *X*-ray crystallographic work to submit together with their communication certain material for deposition with the Centre.* This material will be checked at the Centre for internal consistency and, afterwards, will be available on request to interested readers. The procedure to be adopted will be as follows:

(i) In addition to the communication and the customary covering letter of justification the authors will be expected to provide a complete list of refined co-ordinates (in the form of computer print-out and NOT a retyped version) and a table of bond distances unless these are given in full in the manuscript. If the complete 'crystal data' (*i.e.* cell dimensions and standard deviations, space group, number *Z* of formulae units per cell) are not listed in the manuscript these must also be submitted.

It should be emphasised that the co-ordinates submitted for deposition, whilst not necessarily being 'fully' refined, should correspond to the stage of refinement described in the preliminary communication and should be the set for which the *R* factor is quoted. It follows that all bond distances given in the preliminary communication should correspond, apart from any rounding-off errors, with bond distances which can be calculated from the deposited co-ordinates.

(ii) The communication will be assessed in the customary fashion, the material for deposition also being made available to the referees concerned. If the communication is accepted the Society will forward the material for deposition to the C.C.D.C. A statement will be made in the communication that particular material is available from the Centre on request.

(iii) The C.C.D.C. will acknowledge receipt of the material. When a communication is published the deposited material will be evaluated and included in their files as part of their normal abstracting cycle. The evaluation consists of recalculation of the bond lengths from the author's co-ordinates and comparison of these with the author's values. All data on the Centre's files have to pass this internal consistency test. It will not, however, be possible for the evaluation to be made before the appearance of the preliminary communication in print.

(iv) Finally, where an author plans not to follow-up his preliminary communication with a full paper he will be required to submit, in addition to the material outlined above, a copy of the structure factor table for the work presented for deposition with the British Library, Lending Division. In this way it too will be available to interested readers.

(2) In order to aid the readability of communications it is recommended that each should contain a line drawing of the compound under discussion where appropriate.

* Applies only to compounds containing organic carbon atoms.

Papers in Dalton and Perkin Transactions

The sub-committee considered evidence which indicated that *X*-ray crystallographic papers submitted to the *Journal* were assessed in a less rigorous fashion than those reporting other areas of work. Although the sub-committee felt that this claim was largely unsubstantiated it was agreed that improvement of both assessment procedure and presentation of work was possible. The following recommendations have, therefore, been adopted.

(1) Crystallographic papers will be assessed for their chemical as well as their crystallographic interest.

(2) Unless both specifically requested by the author and recommended by the referees for publication, vibrational parameters will be routinely deposited with the structure factors as a Supplementary Publication. Where vibrational parameters are to be published they should be in the form of U_{ij} with units of Å^2.

Referees are reminded that they may, at their discretion, recommend other material for deposition where in their view its inclusion in the parent paper is not justified by its interest.

(3) Each paper should contain a line drawing of the compound under discussion where appropriate in addition to the usual crystallographic figures.

NOTICE TO AUTHORS—No. 12/1977

Publication of Theoretical and Computational Papers

The Primary Journals Committee has been considering future policy towards the publication of papers with a heavily computational content, particularly where these involve standard methods, such as semi-empirical or *ab initio* calculations of molecular electronic properties using readily available computer programmes. Many such papers report what would be considered 'routine work' in other areas of chemistry, and have often included extensive detail.

A specialist sub-committee formulated a set of proposals which were circulated to a large representative sample of theoretical chemists and met with general acceptance. These, with the comments on them, form the basis of this notice.

The Primary Journals Committee recognises that computational work can play a valuable role in chemistry, and will probably continue to do so on an increasing scale. It accepts the time-honoured principle that the first criterion for publication of a paper by the Society should be the worthiness of the chemical problem considered, rather than the particular techniques employed by the author. For example, the use of a new computing algorithm, or the modification of a programme, would not usually, on its own, provide sufficient justification for publication.

The Primary Journals Committee recommends to authors the following guidelines for the preparation of computational papers, so that the material can be presented concisely and effectively.

(i) Papers should be submitted to the appropriate journal: a paper containing innovations in theory to Faraday Transactions II, one in which the computations are incidental to the chemistry to Perkin, Dalton, or Faraday I Transactions. Papers concerned mainly with computational details are unlikely to be accepted.

(ii) The purpose of the paper and the precise objectives of the calculations performed should be clearly stated: the results obtained should be reported only in so far as they relate to those objectives.

(iii) Many papers use a routine procedure based on a well documented method, be it semi-empirical or *ab initio*. It is then sufficient to name the particular variant, referring to key papers in which the method was developed, to cite the computer programme used, and to indicate *briefly* any modification made by the author. A review of theoretical background would be out of place, but an author should say why he considers the method adequate for his purposes.

(iv) Extensive tabulation of numerical results, such as the magnitudes of atomic orbital coefficients, electron populations, contour maps of molecular orbitals and electron densities, and peripheral material of a similar nature, is normally unnecessary. Lengthy line-by-line discussion of such material is, as a general rule, quite unacceptable. Where an author considers that there is a special need to make such material available to other workers, as with highly accurate computations, for example, then this may be deposited with the British Library as a Supplementary Publication. Such material should be submitted with the main paper, clearly distinguished from it, and referred to in the main text.

Guidelines can never provide sufficient criteria for acceptance or rejection of a paper. Critical assessment of the theoretical methods used in a computation, and of their suitability for the purpose in hand, will continue to be entrusted to specialist referees who must also decide whether the results are new and advance science.

NOMENCLATURE INDEX

Listed here are rules for naming, symbolizing and representing chemical compounds, formulas and data published by IUPAC in recent years. Nomenclature rules are developed by IUPAC Commissions and initially published in provisional form. Comments are sought during the following period, and changes may be incorporated before the rules are approved for publication in definitive form.

ACTIVITIES

Definition of Activities and Related Quantities. Appendix 1 of "Manual of Symbols and Terminology for Physicochemical Quantities and Units", 1979 Edition. Available from Pergamon Press.

AMINO ACIDS AND DERIVATIVES

Nomenclature of Amino Acids (Provisional Nomenclature Appendix No. 46, September 1975)

Symbols for Amino Acid Derivatives and Peptides (*Pure & Appl. Chem.*, Vol. 40, No. 3, 1974, pp. 315-331).

see: proteins & peptides

ANALYTICAL CHEMISTRY

Compendium of Analytical Nomenclature, Definitive Rules 1977. Published as a book by Pergamon Press, Oxford. 1978.

Guide to Trivial Names and Synonyms (for Substances used in Analytical Chemistry) *Pure & Appl. Chem.*, No. 4, 1978, p. 339).

see also: Microchemical Analysis, Spectrochemical Analysis, Chemical Analysis.

ATOMIC ABSORPTION / EMISSION

See: Spectrochemical Analysis.

BIOCHEMISTRY

Recommendations for Measurement and Presentation of Biochemical Equilibrium Data (Provisional Nomenclature Appendix No. 61, July 1977, *Info. Bull.*).

see: Clinical Chemistry, Phosphorus - containing compounds of Biochemical Importance, Nucleic Acids, Proteins, Enzymes, Vitamins, Lipids, Carbohydrates.

BORON COMPOUNDS:

Nomenclature of Inorganic Boron Compounds (*Pure & Appl. Chem.*, Vol. 30, Nos. 3-4, 1972, pp. 681-710).

CALORIMETRY

See: Thermodynamics.

CARBOHYDRATES

Carbohydrates Nomenclature (Tentative Nomenclature Appendix No. 7, September 1970).

CARBON

International cooperation on characterization and terminology of carbon and graphite. (*Pure & Appl. Chem.*, Vol. 51, No. 7, 1979, pp. 1561-1574).

CAROTENOIDS

Nomenclature of Carotenoids (*Pure & Appl. Chem.*, Vol. 41, No. 3, 1975, pp. 405-431).

CATALYSIS

Heterogenous Catalysis—see: Surface Chemistry.

CHEMICAL ANALYSIS

Recommendations for presentation of data on compleximetric indicators. 1. General (*Pure & Appl. Chem.*, Vol. 51, No. 6, 1979, pp. 1357-1336).

Colorimetric and fluorimetric determination of aldehydes and ketones (*Pure & Appl. Chem.*, Vol. 51, No. 8, 1979, pp. 1803-1814).

Colorimetric and Fluorimetric determination of steroids (*Pure & Appl. Chem.*, Vol. 51, No. 10, 1979, pp. 2157)

Recommendations for Publication of Papers on Precipitation Methods of Gravimetric Analysis (Provisional Nomenclature Appendix No. 69, December 1977, *Info. Bull.*).

Recommended Nomenclature for Automatic Analysis (*Pure & Appl. Chem.*, Vol. 21, No. 4, 1970, pp. 527-531).

See: Spectrochemical Analysis, Electrochemistry (for Electroanalytical Techniques), Microchemical Analysis, Equilibria.

CHROMATOGRAPHY

Recommendations on Nomenclature for Chromatography (*Pure & Appl. Chem.*, Vol. 37, No. 4, 1974, pp. 445-462).

CLINICAL CHEMISTRY

Quantities and Units in Clinical Chemistry (*Pure & Appl. Chem.*, Vol. 51, No. 12, 1979, p. 2451-2480).

List of Quantities in Clinical Chemistry (*Pure & Appl. Chem.*, Vol. 51, No. 12, 1979, p. 2481-2502).

Characteristics and Attributes of Instruments intended for Automated Analysis in Clinical Chemistry (*Info. Bull.*, No. 3, 1978).

Quantities and Units in Clinical Chemistry - Optical Spectroscopy: Part 1 (Theoretical Outline and General Quantities) (*Info. Bull.*, No. 3, 1978).

COLLOIDS

See: Surface Chemistry, Micelles.

CORRINOIDS

Nomenclature of Corrinoids (*Pure & Appl. Chem.*, Vol. 48, No. 4, 1976, pp. 495-502).

CYCLITOLS

Nomenclature of Cyclitols (*Pure & Appl. Chem.*, Vol. 37, Nos. 1-2 1974, pp. 283-297).

NMR DATA

Recommendations for the Presentation of NMR Data for Publication in Chemical Journals—B. Conventions Relating to Spectra from Nuclei Other than Protons (*Pure & Appl. Chem.*, Vol. 45, Nos. 3-4, 1976, pp. 217-219).

Recommendations for the Presentation of NMR Data for Publication in Chemical Journals—A. Conventions Relating to Proton Spectra (*Pure & Appl. Chem.*, Vol. 29, No. 4, 1972, pp. 625-628).

NUCLEAR CHEMISTRY

Radioactive ^{63}Ni in biological research. (*Pure & Appl. Chem.*, Vol. 51, No. 6, 1979, pp. 1375-1389).

Recommendations on Nomenclature for Nuclear Chemistry (Provisional Nomenclature Appendix No. 25, June 1972).

Reference materials for trace analysis by radioanalytical methods. (*Pure & Appl. Chem.*, Vol. 51, No. 5, 1979).

Procedure for measurement of 14-MeV neutron fluxes from accelerators for activation analysis. (*Pure & Appl. Chem.*, Vol. 49, No. 3, 1977).

NUCLEIC ACIDS

Abbreviations and Symbols for Nucleic Acids, Polynucleotides and their Constituents (*Pure & Appl. Chem.*, Vol. 40, No. 3, 1974, pp. 277-290).

ORGANIC CHEMISTRY

Nomenclature of Organic Chemistry (a 550 page hardcover volume, 1979, available from Pergamon Press, Oxford).
Section A: Hydrocarbons.
Section B: Fundamental Heterocyclic Systems.
Section C: Characteristic Groups containing carbon, hydrogen, oxygen, nitrogen, halogen, sulfur, selenium and tellurium.
Section D: Organic Compounds containing elements that are not exclusively carbon, hydrogen, oxygen, nitrogen, halogen, sulfur, selenium and tellurium.
Section E: Stereochemistry
Section F: General Principles for the naming of natural products and related compounds.
Section H: Isotopically modified compounds.

Revision of the extended Hantzsch-Widman System of Nomenclature for Heteromonocycles (*Pure & Appl. Chem.*, Vol. 51, No. 9, 1979, pp. 1995-2003).

Nomenclature of Tetrapyrroles(*Pure & Appl. Chem.*, Vol. 51, No. 11, 1979, pp. 2251-2304).

See: Physical Organic Chemistry.

PH

Recommended Reference Materials for Realization of Physiochemical Properties: Potentiometric Ion Activities (*Pure & Appl. Chem.*, No. 11/12, 1978, p. 1485).

PHOSPHORUS COMPOUNDS

Nomenclature of Phosphorus-containing Compounds of Biochemical Importance. (Provisional Nomenclature Appendix No. 66, December 1977).

PHYSICAL ORGANIC CHEMISTRY

Glossary of terms used in physical organic chemistry. (*Pure & Appl. Chem.*, Vol. 51, No. 8, 1979, pp. 1725-1802).

PHYSICOCHEMICAL QUANTITIES AND UNITS

Manual of Symbols and Terminology for Physicochemical Quantities and Units. (*Pure & Appl. Chem.*, Vol. 31, No. 1. 1979 pp. 1). (Also available as soft-cover booklet from Pergamon Press, Oxford.)

See: pH, Spectrochemical Analysis, Reference Materials.

POLYMERS

Sterochemical definitions and notations relating to polymers. (*Pure & Appl. Chem.*, Vol. 48, No. 3, 1976, pp. 373-385).

List of Standard Abbreviations (Symbols) for Synthetic Polymers and Polymer Materials (*Pure & Appl. Chem.*, Vol. 40, No. 3, 1974, pp. 473-476).

Basic Definitions of Terms Relating to Polymers (*Pure & Appl. Chem.*, Vol. 40, No. 3, 1974, pp. 477-491).

PRESENTATION OF DATA

See: NMR, Raman Spectra, Thermodynamics, Mossbauer Spectra, Electron Spectroscopy, Infrared Spectra, Quantum Chemistry, Micelles, Chromatography, Chemical Analysis, Spectrochemical Analysis, Electrochemistry, Equilibria, Surface Analysis.

PROTEINS & PEPTIDES

Nomenclature of Peptide Hormones (Provisional Nomenclature Appendix No. 48, September 1975).

Abbreviations and Symbols for the Description of Conformation of Polypeptide Chains (*Pure & Appl. Chem.*, Vol. 40, No. 3, 1974, pp. 291-308).

Abbreviated Nomenclature of Synthetic Polypeptides (Polymerized Amino Acids) (*Pure & Appl. Chem.*, Vol. 33, Nos. 2-3, 1973, pp. 437-444).

Nomenclature of Iron-Sulfur Proteins (Provisional Nomenclature Appendix No. 32, August, 1973).

A One-letter Notation for Amino Acid Sequences (*Pure & Appl. Chem.*, Vol. 31, No. 4, 1972, pp. 639-645).

Rules for Naming Synthetic Modifications of Natural Peptides (*Pure & Appl. Chem.*, Vol. 31, No. 4, 1972, pp. 647-653).

QUANTUM CHEMISTRY

Expression of Results in Quantum Chemistry (*Pure & Appl. Chem.*, Vol. 50, 1978, pp. 75-79).

QUINONES

Nomenclature of Quinones with Isoprenoid Side-Chains (*Pure & Appl. Chem.*, Vol. 38, No. 3, 1974, pp. 439-447).

RADIATION

Recommended Names and Symbols for Light and Related Electromagnetic Radiation (Manual of Symbols and Terminology for Physicochemical Quantities and Units, 1979, Section 2.8, Pergamon Press, Oxford).

RAMAN SPECTRA

Recommendations for the Presentation of Raman Spectra for Cataloging and Documentation in Permanent Data Collections (*Pure & Appl. Chem.*, Vol. 36, Nos. 1-2, 1973, 275-278).

REFERENCE MATERIALS

Recommended Reference Materials for the Realization of Physicochemical Properties:
- General Introduction (*Pure & Appl. Chem.*, Vol. 40, 1974, pp. 391).
- Enthalpy (*Pure & Appl. Chem.*, Vol. 40, 1974, pp. 399).
- Optical Rotation (*Pure & Appl. Chem.*, Vol. 40, 1974, pp. 451).
- Surface Tension (*Pure & Appl. Chem.*, Vol. 40, 1974, pp. 457).
- Optical Refraction (*Pure & Appl. Chem.*, Vol. 40, 1974, pp. 463).
- Molecular Weight (*Pure & Appl. Chem.*, Vol. 48, 1976, pp. 241).
- Absorbance and Wavelength (*Pure & Appl. Chem.*, Vol. 49, 1977, pp. 661).
- Pressure-volume-temperature relationships (*Pure & Appl. Chem.*, Vol. 49, 1977, pp. 1437).
- Reflectance (*Pure & Appl. Chem.*, Vol. 50, 1978, pp. 1477).
- Potentiometric ion activities (*Pure & Appl. Chem.*, Vol. 50, 1978, pp. 1485).
- Testing Distillation Columns (*Pure & Appl. Chem.*, Vol. 51, 1979, No. 12).

See: Nuclear Chemistry.

SOLUTION CHEMISTRY

Conditional diffusion coefficients of ions and molecules in solution. An appraisal of the conditions and methods of measurement (*Pure & Appl. Chem.*, Vol. 51, No. 7, pp. 1575-1582, 1979).

Recommendations on the Usage of the Terms "Equivalent" and "Normal" (*Pure & Appl. Chem.*, Vol. 50, 1978, pp. 325-338).

ELECTROCHEMISTRY

Recommended terms, symbols, and definitions for electroanalytical chemistry. (*Pure & Appl. Chem.*, Vol. 51, No. 5, 1979, pp. 1159).

Selectivity coefficients of ion-selective electrodes. (*Pure & Appl. Chem.*, Vol. 51, No. 9, 1979, pp. 1913-1980).

Recommendations for Publishing Manuscripts on Ion-Selective Electrodes (*Info. Bull.* No. 1, 1978, pp. 69-74).

Standard Potential of the Silver-Silver Chloride Electrode (*Pure & Appl. Chem.*, No. 11/12, 1978, p. 1701).

Proposed Nomenclature for Transport Phenomena in Electrolytic Systems (Provisional Nomenclature Appendix No. 59, July 1977).

Electrode Reaction Orders, Transfer Coefficients and Rate Constants—Amplification of Definitions and Recommendations for Publication of Parameters (Provisional Nomenclature Appendix No. 60, July 1977).

Classification and Nomenclature of Electroanalytical Techniques (*Pure & Appl. Chem.*, Vol. 45, No. 2, 1976, pp. 81-97).

Status of Faraday Constant as an Analytical Standard (*Pure & Appl. Chem.*, vol. 45, No. 2, 1976, pp. 125-130).

Recommendations for Sign Conventions and Plotting of Electrochemical Data (*Pure & Appl. Chem.*, Vol. 45, No. 2, 1976, pp. 131-134).

Recommendations for Nomenclature of Ion-Selective Electrodes (*Pure & Appl. Chem.*, Vol. 48, No. 1, 1976, pp. 127-132).

Electrochemical Nomenclature (*Pure & Appl. Chem.*, Vol. 37, No. 4, 1974, pp. 499-516).

ELECTRON SPECTROSCOPY

Nomenclature and Spectral Presentation in Electron Spectroscopy Resulting from Excitation by Photons (*Pure & Appl. Chem.*, Vol. 45, Nos. 3-4, 1976, pp. 221-224).

ELEMENTS

Recommendations for the Name of Elements of Atomic Numbers Greater than 100 (*Pure & Appl. Chem.*, Vol. 51, No. 2, 1979, pp. 381).

Atomic Weights of the Elements, 1977 (*Pure & Appl. Chem.*, Vol. 51., No. 2, 1979).

ENZYMES

Nomenclature of Multiple Forms of Enzymes (Provisional Nomenclature Appendix No. 68, December 1977).

Enzyme Nomenclature (Book, 443, pages; casebound and soft-cover editions Elsevier, POB, 1270, Amsterdam, Netherlands).

EQUILIBRIA

Recommendations for presentation of data on compleximetric indicators 1. General. (*Pure & Appl. Chem.*, Vol. 51, No. 6, 1979, pp. 1357-1366).

Proposed Symbols for Metal Complex Mixed Ligand Equilibria (*Info. Bull.*, No. 3, 1978).

FLUID FLOW

Selected definitions, terminology and symbols for rheological properties. (Manual of Symbols and terminology for physicochemical quantities and units. Appendix II.) (*Pure & Appl. Chem.*, Vol. 51, No. 5, 1979, pp. 1213).

FOOD

A survey of methods for the determination of non-volatile nitrosamines in food. (*Pure & Appl. Chem.*, Vol. 51, No. 6, 1979 pp. 1367-1374).

See: Lipids, Carbohydrates, Amino Acids.

INFRARED SPECTRA

Recommendations for the Presentation of Infrared Absorption Spectra in Data Collections—A. Condensed Phases (*Pure & Appl. Chem.*, 50, 1978, pp. 231-236).

Recommendations for the presentation of Infrared Absorption Spectra in Data Collections (Provisional Nomenclature Appendix No. 50, September 1976).

See: Molecular Force Constants.

INORGANIC CHEMISTRY

Nomenclature of Inorganic Chemistry—Isotopically modified compounds. (*Pure & Appl. Chem.*, Vol. 51, No. 9 (1979) pp. 1981-1994).

Nomenclature of Inorganic Chemistry (*Pure & Appl. Chem.*, Vol. 28, No. 1 1971, pp. 1-110). Also published as a book popularly known as the "Red Book" by Pergamon Press, Oxford.

See: Nitrogen, Carbon, Solution Chemistry, Atomic Weights, Boron Compounds, Equilibria.

INSECTICIDES

Definitions and guidelines for describing and evaluating pesticide residues. (*Pure & Appl. Chem.*, Vol. 51, No. 3, 1979, pp. 677).

Toxaphene (camphechlor). A spectral report. (*Pure & Appl. Chem.*, Vol. 51, No. 7, 1979, pp. 1583-1602).

Status report on Clean-up and determination procedures. (*Pure & Appl. Chem.*, Vol. 51, No. 7, 1979, pp. 1603-1615).

Recommended methods for the determination of residues of pyrethrins and piperonyl butoxide. (*Pure & Appl. Chem.*, Vol. 51, No. 7, 1979, pp. 1615-1623).

ION EXCHANGE

Recommendations on Ion Exchange Nomenclature (*Pure & Appl. Chem.*, Vol. 29, No. 4, 1972, pp. 617-624).

LIPIDS

Nomenclature of Lipids (Provisional Nomenclature Appendix No. 67, December, 1977).

LIQUID-LIQUID DISTRIBUTION

Proposed Terminology and Symbol for the Transfer of Solutes from One Solvent to Another (*Pure & Appl. Chem.*, No. 6, 1978, p. 587).

Recommended Nomenclature for Liquid Liquid Distribution (Solvent Extraction): revised 1975 (Provisional Nomenclature Appendix No. 63, July 1977).

MACROMOLECULES

See: Polymers, Proteins.

MASS SPECTROMETRY

Recommendations for Symbolism and Nomenclature for Mass Spectroscopy (*Pure & Appl. Chem.*, 50, 1978, pp. 65-73).

Recommendations for Nomenclature of Mass Spectrometry (*Pure & Appl. Chem.*, Vol. 37, No. 4, 1974, pp. 469-480).

MICELLES

Reporting experimental data dealing with critical micellization concentrations (c.m.c's) of aqueous surfactant systems. (*Pure & Appl. Chem.*, Vol. 51, No. 5. 1979, pp. 1083).

MICROCHEMICAL ANALYSIS

Terminology for Scales of Working in Microchemical Analysis (*Pure & Appl. Chem.*, Vol. 51, No. 1, 1979 p. 43).

General Aspects of Trace Analytical Methods.
II. Standard Reference Materials for Trace Analysis (*Pure & Appl. Chem.*, No. 11/12, 1978, pp. 1531-1700).
III. Contamination in Trace Analysis (*Pure & Appl. Chem.*, No. 11/12, 1978, p. 1519).

Recommendations on Nomenclature of Scales of Working in Analysis (Provisional Nomenclature Appendix No. 18, February 1972).

MOLECULAR FORCE CONSTANTS

Definition and Symbolism of Molecular Force Constants (*Pure & Appl. Chem.*, No. 11/12, 1978, p. 1707).

MOSSBAUER SPECTRA

Nomenclature and Conventions for Reporting Mossbauer Spectroscopic Data (*Pure & Appl. Chem.*, Vol. 45, Nos. 3-4, 1976, pp. 211-216).

NITROGEN

Nomenclature of Hydrides of Nitrogen and Derived Cations, Anions and Ligands (*Info. Bull.*, No. 2, 1978).

Recommendations on Nomenclature for Contamination Phenomena in Precipitation from Aqueous Solutions (*Pure & Appl. Chem.*, Vol. 37, No. 4, 1974, pp. 463-468).

See: Liquid-Liquid distribution
Electrochemistry (For Transport Phenomena).

SOLVENT EXTRACTION

See: Liquid-Liquid Distribution.

SPECTROCHEMICAL ANALYSIS

Recommendations for Publication of Papers on Methods of Molecular Absorption Spectrophotometry in Solution between 200 and 800 nm (*Pure & Appl. Chem.*, Vol. 50, 1978, pp. 237-242).

Recommended Reference Materials for Realization of Physiochemical Properties; Reflectance (*Pure & Appl. Chem.*, No. 11/12, 1978, p. 1477).

Nomenclature, Symbols, Units and Their Usage in Spectrochemical analysis—IV. X-Ray Emission Spectroscopy (Provisional Nomenclature Appendix No. 54, December, 1976).

Nomenclature, Symbols, Units and Their Usage in Spectrochemical Analysis—II. Data Interpretation (*Pure & Appl. Chem.*, Vol. 45, No. 2, 1976, pp. 99-103).

Nomenclature, Symbols, Units and Their Usage in Spectrochemical Analysis—III. Analytical Flame Spectroscopy and Associated Non-Flame Procedures (*Pure & Appl. Chem.*, Vol. 45, No. 2, 1976, pp. 105-123).

Nomenclature, Symbols, Units and Their Usage in Spectrochemical Analysis—1. General Atomic Emission Spectroscopy (*Pure & Appl. Chem.*, Vol. 30, Nos. 3-4, 1972, pp. 651-679).

See: Infrared Spectra, Mass Spectrometry, Electron Spectroscopy, Raman Spectra, NMR, Reference materials, Chemical Analysis.

STEROIDS

Nomenclature of Steroids (*Pure & Appl. Chem.*, Vol. 31, Nos. 1-2, 1972 pp. 283-322).

See: Chemical Analysis

SURFACE CHEMISTRY

General aspects of trace analytical methods—IV. Recommendations for nomenclature, standard procedures and reporting of experimental data for surface analysis techniques (*Pure & Appl. Chem.*, Vol. 51, No. 11, 1979, pp. 2243-2250).

Definitions, Terminology and Symbols in Colloid and Surface Chemistry—II. Heterogenous Catalysis (*Pure & Appl. Chem.*, Vol. 46, No. 1, 1976, pp. 71-90).

Definitions, Terminology and Symbols in Colloid and Surface Chemistry—I. (*Pure & Appl. Chem.*, Vol. 31, No. 4, 1972, pp. 577-638).

THERMODYNAMICS

Recommendations for Nomenclature of Thermal Analysis—II. DTA and TG Apparatus and Technique, III. DTA and TG Curves (Provisional Nomenclature Appendix No. 64, July, 1977).

Recommendations for Nomenclature of Thermal Analysis (*Pure & Appl. Chem.*, Vol. 37, No. 4, 1974, pp. 439-444).

A Guide to Procedures for the Publication of Thermodynamic Data (*Pure & Appl. Chem.*, Vol. 29, No. 1-3, 1972, pp. 395-408).

TOCOPHEROLS

Nomenclature of Tocopherols and Related Compounds (Provisional Nomenclature Appendix No. 47, September 1975).

VITAMINS

Nomenclature for Vitamin B-6 and Related Compounds (*Pure & Appl. Chem.*, Vol. 33, Nos. 2-3, 1973, pp. 445-452).

X-RAY SPECTROSCOPY

See: Spectrochemical Analysis.

ZEOLITES

Chemical nomenclature and formulation of compositions of synthetic and natural zeolites. (*Pure & Appl. Chem.*, Vol. 51, No. 5, 1979, pp. 1091).

ERRATA

Dalton Transactions

1979, page 1959, right column, lines 20 and 21: *delete* the values 0.949, 1.127, 1.131, and 1.343 and *insert* 0.935, 0.963, 1.114, and 1.148 respectively; Table, columns t_1 and t_2, *delete* first 4 entries in each and *replace* by: (t_1) 0.952, 0.947, 0.941, and 0.935; (t_2) 1.135, 1.129, 1.121, and 1.114 respectively.

1980, page 509, left-hand column, lines 17 and 18: *delete* ' a mixture of the two diastereoisomeric forms ' and *insert* ' the chiral nature of the two enantiomers '.

page 1464, Table 4: column 2, *delete* numerical values and *insert* 4.92, 4.53, 4.12, 3.72, −0.22, −0.08, 1.05, 4.20, 3.91, 6.30, 4.70, and 3.90 respectively; column 4, *delete* ' ΔG° ' and *insert* ' ΔG° '.

page 1842, right-hand column, Figure 4: *delete* the symbol α as shown and *insert* to indicate the N–Si–A^1 angle.

PUBLICATIONS & INFORMATION BOARD

Chairman

C. Kemball, M. A., Sc. D., C. Chem., F.R.S.C., M.R.I.A., F.R.S.E., F.R.S.

* K. W. Bagnall, B.Sc., Ph.D, D.Sc., C.Chem., F.R.S.C.
H. J. Cluley, M.Sc., Ph.D., C.Chem., F.R.S.C.
C. F. Cullis, M.A., D.Sc., D.Phil., C.Chem., F.R.S.C.
E. A. V. Ebsworth, M.A., Ph.D., Sc.D., C.Chem., F.R.S.C., F.R.S.E.
* P. Gray, M.A., Ph.D., Sc.D., C.Chem., F.R.S.C., F.R.S.
* Sir Ewart Jones, M.A., D.Sc., F.R.S., C.Chem., F.R.S.C.
J. A. Pickup, B.A.
C. W. Rees, Ph.D., D.Sc., C.Chem., F.R.S.C., F.R.S.
* J. R. Ruck Keene, C.B.E., M.A.
M. A. Sim
* A. Spinks, B.Sc., Ph.D., M.A., C.Chem., F.R.S.C., F.I.Biol., F.R.S.
* T. M. Sugden, C.B.E., Sc.D., Sec.R.S.
K. W. Sykes, M.A., B.Sc., D.Phil., C.Chem., F.R.S.C.
* J. M. Ward, B.Sc., C.Chem., F.R.S.C.
W. B. Whalley, D.Sc., Ph.D., C.Chem., F.R.S.C.
L. F. Wiggins, Ph.D., D.Sc., C.Chem., F.R.S.C.
D. W. Wilson, M.Sc., C.Chem., F.R.S.C.

JOURNALS COMMITTEE

Chairman

P. Gray, M.A., Ph.D., Sc.D., C.Chem., F.R.S.C., F.R.S.

E. W. Abel, D.Sc., C.Chem., F.R.S.C.
T. W. Bentley, B.Sc., Ph.D., A.R.C.S.
A. J. Downs, M.A., Ph.D.
C. R. Ganellin, Ph.D., B.Sc., C.Chem., F.R.S.C.
* D. Husain, B.Sc., M.A., Ph.D., D.Sc., Sc.D., C.Chem., F.R.S.C., F.Inst.P.
* C. Kemball, M.A., Sc.D., C.Chem., F.R.S.C., M.R.I.A., F.R.S.E., F.R.S.
G. W. Kirby, M.A., Ph.D., Sc.D., C.Chem., F.R.S.C., F.R.S.E.
G. J. Leigh, B.Sc., Ph.D.
P. M. Maitlis, Ph.D., B.Sc., D.Sc., C.Chem., F.R.S.C.
J. N. Murrell, B.Sc., Ph.D., C.Chem., F.R.S.C.
J. M. Ottaway, B.Sc., Ph.D., D.Sc., C.Chem., F.R.S.C.
G. E. Penketh, B.Sc., C.Chem., F.R.S.C., F.Inst.Pet.
T. B. Pierce, B.Sc., M.A., D.Phil.
H. Suschitzky, D.Sc., Ph.D., B.Sc., C.Chem., F.R.S.C.
I. O. Sutherland, M.A., Ph.D.
H. R. Thirsk, D.Sc., Ph.D., B.Sc., C.Chem., F.R.S.C.
D. H. Whiffen, M.A., D.Phil., D.Sc., C.Chem., F.R.S.C., F.R.S.
* I. A. Williams, M.A., Ph.D., M.I.Inf.Sc., C.Chem., M.R.S.C.
D. A. Young, Ph.D., D.Sc.

* Ex officio members

© Copyright 1980 by The Royal Society of Chemistry

RSC Publications News

Specialist Periodical Reports

Heterocyclic Chemistry Vol. 1

Senior Reporters: H. Suschitzky and O. Meth-Cohn

This new Specialist Periodical Report combines the material previously reviewed in "Saturated Heterocyclic Chemistry", "Aromatic and Heteroaromatic Chemistry", both of which are now discontinued, and "Organic Compounds of Sulphur, Selenium and Tellurium", which although still thriving has surrendered its heterocyclic parts but will continue to report on β Lactam antibiotic chemistry. The literature reviewed in this volume covers the period July 1978 to July 1979.

Brief Contents:
Three-membered Ring Systems; Four-membered Ring Systems; Five-membered Ring Systems; Six-membered Ring Systems; Seven-membered Ring Systems; Eight-membered Ring Systems; Bridged Systems; Conformational Analysis.

Hardcover 543 pp 0 85186 970 X
Price £69.00 ($186.50)
RSC Members £27.50

Macromolecular Chemistry Vol. 1

Senior Reporters: A. Jenkins and J. F. Kennedy

This first volume in the series on Macromolecular Chemistry reviews the literature published in the period 1977 to 1978.

Brief Contents:
Chain Reaction Polymerization; Step Growth Polymerization; Copolymerization and Multicomponents Polymerization; Polysaccharides and Glycoproteins; Natural Polymers; Proteins and Enzymes; Natural Polymers; Nucleic Acids; Inorganic Polymers; Configurations; NMR Spectroscopy; Neutron Scattering; Crystallization; Characterization of Synthetic Polymers; Thermodynamics of Solutions and Mixtures; Engineering and Technology; Reactions of Polymers (Polymer Modification); Degradation; Catalysis on Macromolecules; Biomedical Applications; Computer Applications.

Hardcover 504 pp 0 85186 840 1
Price £39.00 ($105.50)
RSC Members £16.00

Spectroscopic Properties of Inorganic and Organometallic Compounds Vol. 12

Senior Reporters: E. A. V. Ebsworth and D. M. Adams

The twelfth volume in the series reviews the recent literature published up to late 1978.

Brief Contents:
Nuclear Magnetic Resonance Spectroscopy; Nuclear Quadrupole Resonance Spectroscopy; Microwave Spectroscopy; Vibrational Spectra of Small Symmetric Species and of Single Crystals; Characteristic Vibrational Frequencies of Compounds containing Main-group Elements; Vibrational Spectra of Transition element Compounds; Vibrational Spectra of Some Co-ordinated Ligands; Mössbauer Spectroscopy.

"In addition to reviewing extensive numbers of individual papers, each chapter also cites pertinent reviews which have appeared. The extent of literature coverage and the quality of the writing in this and other volumes accounts for the utility of the series. Libraries and specialists should seriously consider adding this volume to their collections."
–Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry, reviewing Vol. 10

Hardcover 421 pp 0 85186 920 3
Price £41.50 ($112.25)
RSC Members £17.00

Miscellaneous Publication

Hazards in the Chemical Laboratory 3rd Edition

Edited by L. Bretherick

Hazards in the Chemical Laboratory has become established as a vital handbook in all types of laboratory equipment. This third edition contains chapters on: The Health and Safety at Work etc. Act 1974; Reactive Chemical Hazards; Safety Planning and Management; Fire Protection; Health Care and First Aid; Precautions against Radiations; Hazardous Chemicals.

The section dealing with hazardous chemicals provides detailed information on the properties, warning phrases, injunctions, toxic effects, hazardous reactions, first-aid treatments, fire hazards and spillage, disposal procedures for all common laboratory chemicals. Short notes are given on the hazardous properties and reactions of several hundred other less common chemicals.

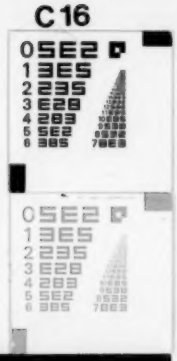
Protective PVC cover 575 pp 0 85186 419 8
Price not yet available
Still available: 2nd Edition 1978 Price £9.50 ($25.75)
RSC Members £7.00

ROYAL SOCIETY OF CHEMISTRY

RSC Members should send their orders to:
The Membership Officer, The Royal Society of Chemistry, 30, Russell Square, London WC1B 5DT.

All other orders should be sent to:
The Royal Society of Chemistry, Distribution Centre, Blackhorse Road, Letchworth, Herts SG6 1HN.

Printed in Great Britain by Richard Clay (The Chaucer Press), Ltd., Bungay, Suffolk


C16
0 5 E 2
1 3 E 5
2 2 3 5
3 E 2 8
4 2 8 3
5 5 E 2
6 3 8 5
7 0 8 9